Social Inequality at Köhne Shahar, an Early Bronze Age Settlement in Iranian Azerbaijan

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Abstract

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Due to increasing investigations and studies of the Kura-Araxes cultural communities, our information about this enigmatic archaeological culture has increased in many respects. Its interactions and regional variations in terms of cultural materials have been analyzed by many scholars. However, our knowledge about its societal variations is still very limited. We do not yet know much about social dynamics behind its material culture that spread out through vast regions in the Caucasus and the Near East. Indeed, there are some fundamental questions about the Kura-Araxes cultural communities that need further investigation.

To address these questions, I focus on social inequality and its material manifestations through data collected from Köhne Shahar a Kura-Araxes site in the Chaldran area of the Iranian Azerbaijan. This study uses new data collected from one season of survey and three seasons of excavations at Köhne Shahar to examine the material manifestation of social inequality. Excavations at Köhne Shahar have generated data which allows me to present some preliminary conclusions regarding the state of social inequality at the settlement. I concentrate on four major features of the site, stratigraphy and chronology, fortification wall and external threat, specialized craft production, and residential segregation. Results from investigation and analyses

of these evidence suggest that external threat and conflict could have played a role in development of political complexity (power inequality) at Köhne Shahar that could have been extended to control over the economy, especially craft production. I further argue that evidence of residential segregation at the site suggest social segmentation and hierarchical ordering within the community of Köhne Shahar. Overall evidence indicates that the site is a special and a complex version of Kura-Araxes Cultural Communities. I further argue that there is a great potential at Köhne Shahar for addressing social complexity and I discuss that further investigations at the site may shed more light on social dynamics in the Kura-Araxes cultural communities.

Table of Contents

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Chapter 1. Introduction

1.1. Objectives and Research Aims

By the late 4th- early 3rd millennium BC, Kura-Araxes material culture spread from southern Caucasus throughout much of the southwest Asia. While its settlement patterns, the architecture, and material culture have been well documented, our knowledge about societal variations, the state of social complexity, and particularly social inequality in Kura-Araxes Cultural Communities (hereafter KACC) [1] is very limited. This study analyzes social inequality as one of the major elements of social structure at Köhne Shahar, a Kura-Araxes settlement in Iranian Azerbaijan.

Aside from some contentions on origin, periodization and chronology, and the dispersal mechanisms of the Kura-Araxes material culture, new perspectives and data have been added to our knowledge of KACC since the collapse of the Soviet Union and arrival of collaborative international research programs into Southern Caucasus in 1990s (Sagona 2014a; 2010; Smith 2005: 255-260). Regional variants of the Kura-Araxes cultural assemblages have been recognized. However, recognition and analyses of regional variations are generally restricted to ceramics and architectural traditions (see Amiran 1965; Kiguradze and Sagona 2003; Sagona 1984; Palumbi 2008b; 2003; Rothman 2003a; b; Todd 1973).

[1] I adopted "Kura-Araxes Cultural Communities" from Philip Kohl (2007: 91-125)

The nature of the spread of Kura-Araxes material culture has been focus of many studies since the 1950s. Many vertical archaeological investigations have been carried out in order to solve the chronological issues and to synchronize the regional chronologies of KACC in order to find their place in the whole picture of the Old World archaeology, and particularly in the Near East. Because of the uneven quality of research up until recently, the internal developmental sequence of KACC had not been well understood (Kohl 1992a: 226).

Studies have focused strongly on the subsistence economies of these communities. In general, the literature on the KACC portray two different types of communities, either transhumant pastoralists or sedentary agriculturalists (Burney and Lang 1971:47; Kohl 1992a: 228-229; Kohl and Lyonnet 2008: 30-31; Kushnareva 1997: 193-194; Monahan 2007; Palumbi 2008b: 311, 324; Rothman 2003a: 102-109; 2005b: 55; Sagona 1984: 139; Piro 2009). An overview of the history of scholarship on the Kura-Araxes, which is given briefly in chapter 3, has been undertaken comprehensively by other scholars (Kohl 2009b; Kushnareva 1997; Sagona 1984; 2010; 2014a; Kiguradze and Sagona 2003; Smith 2005). These scholars consider that these communities were homogeneous, with low degrees of internal socio-economic differentiation (Smith 2005: 258; Kohl 2007: 113); and the Kura-Araxes 'royal tomb' of Arslantepe in southern Anatolia is seen as an exceptional case (Frangipane, et al. 2001: 135; Frangipane 2000: 451; Palumbi 2008b: 107-135; Porter 2012: 65-73; Frangipane and Palumbi 2007).

What is lacking is research on social complexity, societal variability, and internal developmental sequences. This study emphasizes the significance of social inequality as a defining element in social structure in any human society, and analyzes it in one of the Kura-Araxes settlements. Analyzing social differentiation in general, and social inequality in

particular, may address fundamental anthropological questions such as social variability within KACC, in terms of its social evolutionary sequence and the development of social complexity.

Given the interactions with highly complex societies of Mesopotamia, the absence of similar indicators of social complexity in the Southern Caucasus raises questions about the nature of KACC socioeconomic dynamics. None of the Kura-Araxes settlements have revealed comparable degrees of social complexity to those of Maikop or Mesopotamian societies. Archaeological models of early complex societies in Southern Caucasus focus primarily on the formation and expansion of Urartian Kingdom in the first millennium BC, with little reference to its predecessors (Smith, et al. 2004: 1; Smith 2005: 264). On the other hand, many of the most influential models of incipient social complexity are based on southern Mesopotamian examples (Adams 1966: 18-22; 1981; Algaze 2001a).

The discovery of the Kura-Araxes 'royal tomb' at Arslantepe in southern Anatolia may shed some light on social stratification or hierarchy within KACC. This isolated tomb was found on the edge of a large public area from period VIA and is ascribed to a high-status person. Materials from this grave are most likely associated with the KACC, perhaps belonging to a Kura-Araxes "warlord." The features of the tomb, such as human sacrifice, ritual elements, extraordinary richness of the furnishing, and grave goods, mark it as "an elite tomb, perhaps for a royal personage or at all events a member of ruling class" (Frangipane, et al. 2001: 135).

Other than the 'royal tomb' at Arslantepe, we know very little about rituals, craft production and possibly its specialization, the degree of social inequality and hierarchies, and generally about any social variability that may allow us to place KACC among the models that so far have been proposed. According to cemetery data, with the exception of single rich burial at

Arslantepe (see Frangipane 2000; Frangipane, et al. 2001) , almost none show the accumulated wealth of Maikop burials and kurgans in the north Caucasus (Kohl 2007: 91).

Sources, forms, and dynamics of social inequality (see section 1.2 below for an extensive discussion of this term) could be very different from culture to culture, region to region, and time to time. Furthermore, social inequality was manifested differently in different societies and periods. Therefore, the way social inequalities were manifested in Mesopotamian world or Maikop, might be very different from KACC. The lack of the same or similar indicators in KACC does not necessarily mean that there was no social inequality in KACC, or they were egalitarian communities.

Social complexity and variability in KACC are bound up with the questions about its social structure, in particular, status differentiation and social inequality (see Price and Feinman 2010b: 2). In addressing social complexity among KACC, one approach might be to analyze the degree of social inequality. Social inequality commonly refers to unequal access to power, wealth, and prestige (Price and Feinman 2010b: 2). The ordering of statuses and roles in societies and their hierarchical organization are significant components of social inequality. In other words, to address social inequality is also to address the organizing principle of hierarchical structure of human society (Price and Feinman 2010b: 2).

Furthermore, subsuming the development of social inequality under social complexity has led scholars to disregard the contextual and chronological differences in the development of these two social processes. The development of social inequality needs to be analyzed in its own right since it is not equivalent to the development of social complexity, although it fuels and fosters its development and accompanies it (see Chapman 2003; McGuire 1983; McGuire and Paynter 1991; Paynter 1989). Yet the development of social inequality contributed greatly to the

development of social complexity. Social inequality and its sources or bases still seem to be a critical piece of the puzzle of KACC. Studying various forms and dimensions of social inequality through its manifestations or material expressions may help us to approach other structuring elements of social complexity as well.

The study of social inequality is not an easy task, not only in the past but even in the present. On the one hand, its intricacies, multi-dimensionality, structure, dynamics, and particularly its subjective aspects make it challenging to analyze. On the other, because it effects social life in many ways, leaves traces, and especially because it is consequential, the same aforementioned aspects open up various ways that one can approach and analyze it.

As I will discuss later in chapter 5 and 6, the site of Köhne Shahar was not formed organically, but rather it was deliberately planned. Namely, top-down centralized agency could be the main factor in the formation of the settlement, especially the citadel. Various studies have questioned some of the major neoevolutionary assumptions, such as population pressure as prime mover, the inevitable linear evolution of societies, and the functionality of social complexity, to name only a few (McGuire 1983; Kohl 1984; Paynter 1989). Köhne Shahar potentially seemed a good case study for the development of complexity based on such paradigms.

Köhne Shahar holds great potential to address questions of human agency and power inequality, and how they mediated political-economic relations that in turn could have led to the development of other aspects social complexity. As I will demonstrate in next chapters, Köhne Shahar might be an ideal settlement to analyze the relationship between the development of social inequality and social complexity and in relation with the rest of its components.

Population aggregation, along with other evidence such as shifts to defensible locations for settlements, fortifications, may be a communal response to external aggression (Maisels 2010: 25). Based on these assumptions, Köhne Shahar appeared to have great potential for addressing fundamental questions of social inequality and complexity in one of the Kura-Araxes communities.

This study addresses social inequality and status differentiation as one of structuring elements of human society at Köhne Shahar. Its concern is particularly internal differentiation, material manifestations of the forms and dimensions of social inequality at the site. Although Köhne Shahar is not a typical Kura-Araxes settlement, understanding its internal social structure may lead us to other aspects of the Kura-Araxes society in general. Social differentiation in the Köhne Shahar community may have the potential to address important anthropological questions about Kura-Araxes society. In this study, I will use new data from the site to address social inequality and argue for variability in the degree of social complexity in Southern Caucasus, long before the emergence of Urartian Kingdom in the Iron Age.

Excavations at Köhne Shahar over the past three years have generated data which allow some preliminary conclusions regarding social inequality, social organization, and the degree of complexity at the settlement. Ultimately, these analyses will generate new hypotheses regarding the state of social complexity in the region in the 4th and 3rd millennium BC.

1.2. Terminology

Defining a term such as social inequality can itself be part of the investigation. However, we need some common points of reference to begin. Vague terminologies can be problematic since I am going to use some terms frequently that are also used differently in many disciplines. Some terms are not well defined, and often are used interchangeably, such as *social structure* and *social organization* in anthropology and archaeology while in other disciplines these terms may have been defined clearly in the literature. Many anthropologists and archaeologists use social structure and social organization generally, synonymously or interchangeably. However, in sociology these terms and their implications are usually used differently with more precision.[2] In order to avoid obscurity and fluidity, here it is worthwhile to provide clear definitions of a few common terms.

Social inequality and stratification; There is no consensus on the definition of inequality; here I would like to use the general understanding proposed by Grabb (2007: 2) as "any of the differences between people (or the socially defined positions they occupy) that are *consequential* for the lives they lead, most particularly for the rights or opportunities they exercise and the rewards or privileges they enjoy." He also highlights the significance of those consequential differences that become *structured* (Grabb 2007: 2). If there is a system of social relationships that determines who gets what and why, inequality is hardened or *institutionalized* which in turn leads to the development of social stratification (Kerbo 2003: 12).

[2] Many sociologists follow Radcliffe-Brown (1952) in differentiating these terms.

Status; "is a position in the system of social stratification in a society" (Treiman 2000: 3042). Individuals in different statuses are expected to play a role. Status indicates our relative social position within a group and is a means to differentiate individuals and groups of people in hierarchical order of a particular society (Middleton 2008: 621; Zelditch 1968; Sarbin 1968; Banton 1996). Anthropologist Ralph Linton (1936: 113) puts it: "a status is a position in a particular pattern. It is thus quite correct to speak of each individual as having many statuses, since each individual participates in the expressions of a number of patterns. A status, as distinct from the individual who may occupy it, is simply a collection of rights and duties."

Role; "behavior patterns that persons within a context appear as members of recognized social identities (or positions) and that they and others hold ideas (expectations) about behaviors in that setting" (Biddle 2000: 2415). Role is a complex of expectations or the part our society expects us to play in a given status. To Ralph Linton (1936: 114) role is a means of analyzing social position or statuses. "A role represents the dynamic aspect of a status. The individual is socially assigned to a status and occupies it with relation to other statuses. When he puts the rights and duties which constitute the status into effect, he is performing a role. There is not roles without statuses or statuses without roles" (1936: 114). It should be added that in this sense, role is a complex set of expected behavior associated with a social position or status and it is not a position by itself (Banton 1996; Sarbin 1968; Zelditch 1968).

Social organization; is characterized by interdependence and "concerns with social action" and defines the roles individuals play in relation to one another. Indeed, "functional relations were more part of the social organization through which social structure is played out" (Barnard 2002: 768-770; see also Turk 2000).

Social structure; "any variables which are stable characteristics of the society" (Stinchcombe 1965: 142), provides a context for action. It describes formal relations between individuals in society and defines the statuses of actors performing roles. Essentially social structure includes the relations between individual people in a particular human society (this term by anthropologists is used as *structural form*). Social structure is objective and accessible, from particular individuals in a given society to generalizations based on the comparison of their statuses to those of other individuals (Barnard 2002: 768-770; Rytina 2000).

Social system; was adopted from biology and used first by Talcott Parsons (1951), as a whole it comprises both social structure and social organization (Barnard 2002: 769). Adopting the idea from biology, social systems are moving equilibria that accommodate change while maintaining overall stability, although equilibria can be broken down. Social systems are capable of self-reproducing, self-organizing, and self-sustaining of their components (Lidz 2008).

1.3. The Outline of the Dissertation

This dissertation is organized into six chapters. In order to avoid cluttering the arguments and the text, all maps and figures have been placed at the end of the dissertation. The chapters are proceed as follows:

Chapter 2, *Scholarship on Social Inequality*, provides a brief overview of scholarship on social inequality in sociology, anthropology, and archaeology. In this chapter I attempt to demonstrate the significance of social inequality in each of these disciplines, especially I discuss

why it matters and how it is approached in each of them. This chapter tries to summarize what we know about social inequality theoretically, how major theories of social inequality developed over time, and how it is conceptualized. It reviews the theoretical approaches to social inequality of each of these disciplines. Finally, I discuss the usefulness of these theories as conceptual tools in practice and analyzing the material aspects that concern archaeologists.

Chapter 3, *History of Scholarship on the Kura-Araxes*, briefly reviews the major characteristics of Kura-Araxes materials, the scholarship on Kura-Araxes settlement data, material culture, subsistence practices, and interregional interactions. Particular attention is given to those studies and data that relate to social inequality, social complexity, and any data that could be used to address societal variations beyond merely the subsistence economy of KACC. This chapter reviews the Caucasus, eastern Anatolia, Levant, and regions to the north western and western Iran.

Chapter 4, *Excavations at Köhne Shahar*, introduces the data collected from three seasons of excavations at Köhne Shahar. The chapter begins with description of the site, its geographic and ecological contexts, followed by an overview of previous archeological work at the site. The chapter then outlines the strategies of excavations, research methods, and recording system employed in the course of excavations. The chapter continues with description of the results of excavations in 2012, 2013, and 2014. In this section I present the results of the stratigraphic sounding, discuss the chronology of archaeological deposits, and then describe the results of large exposures within the citadel and in the outer town. In describing the results, I mostly focus on data relevant to my arguments about social inequality at the site. Of course the amount of data recovered in three seasons of excavations goes beyond what I present here.

In chapter 5, *Discussions: Results of Investigations at Köhne Shahar*, I discuss the results and their implications for social inequality. This chapter seeks to elaborate the general discussion, drawing on the data acquired from survey and three seasons of excavations at Köhne Shahar. It focuses on few broader implications drawn from the data such as stratigraphy and chronology, the fortification wall and external conflict, craft production and its specialization, administrative technologies and record-keeping, and residential segregation. I argue that Köhne Shahar represents a complex version of Kura-Araxes settlement and suggest that there was a greater variability in KACC societies than has been appreciated. Finally, I discuss how social inequality was expressed materially and what form of inequality could be manifested most in this community.

Chapter 6, *Conclusions: Social Inequality at Köhne Shahar*, summarizes the arguments and provides an evaluation of the empirical data collected from three seasons of excavations at the site with regard to their social implications, particularly in terms of various dimensions of social inequality. The dissertation concludes with preliminary remarks and working hypotheses for future directions of research. Furthermore, unlike previous scholars, I argue that the evidence from Köhne Shahar suggests that the development of complex way of life in highland areas such as Iranian Azerbaijan, Caucasus, and eastern Anatolia probably began much earlier than Urartian period. Finally, some general research directions are proposed for future explorations.

Chapter 2. Social Inequality in Social Sciences and Archaeology

Social inequality is an old issue that has involved many of the forefathers of sociology such as Karl Marx, Max Weber, Emile Durkheim, Vilfredo Pareto, not to mention early thinkers such as Plato, Aristotle, Thomas Hobbes, Jean-Jacques Rousseau, and others (Seibert 2008: 2044; Crompton 1998: 1-3; Hurst 1995:214-240; Tumin 1967: 1-11; Goldie and Wolker 2006; Grabb 2007: 1-3; O'Rand 2000) and many contemporary social scientists (see Grusky and Szelenyi 2011; 2007; Grabb 2007; Heller 1969). Social inequality is a fact of social life but is difficult to explain. As Randall Collins notes "obvious social questions may not have obvious or simple answers" (Collins 1992 cited in Grabb 2002: 1).

There is no consensus on the definition of inequality but here it is best to use the general understanding used by Grabb (2007: 2) as "any of the differences between people (or the socially defined positions they occupy) that are *consequential* for the lives they lead, most particularly for the rights or opportunities they exercise and the rewards or privileges they enjoy." He also highlights the significance of those consequential differences that become *structured*. If there is a system of social relationships that determines who gets what and why, inequality is hardened or *institutionalized* and in turn it leads to development of social stratification (Kerbo 2003: 12).

The concept of social inequality is relative, multi-dimensional, multi-component, and is interconnected with some other concepts. In addition, it may take different forms, have various causes, and consequences. These characteristics have made it challenging

to explain. Complications stem from three main issues. First, it is multi-component and contains both objective and subjective variables such as age, sex, race, eye color, height and happiness, liberty, rights, opportunities etc. (Sen 1992; Grusky and Szelenyi 2007; Grabb 2007: 2) . Second, it is multi-dimensional (moral, structural, behavioral, existential, and material) (Fallers 1973; Berreman 1981a). Third complication refers to its dynamics so that it may have various causes, can be diverse in forms and structures, may have patterns, can be generated, is ubiquitous and antique, and may have various consequences (Grusky and Szelenyi 2007; Grusky 2008; Hurst 1995; Tumin 1953; 1967; Davis and Moore 1945; Heller 1969; Lenski 1966: 1-23, 435-441; Grusky and Ku 2008; Cohen 1974: 120; Landtman 1938). In addition, inequality intersects with other key concepts such as class, poverty, social conflict, and domination.

Stanislaw Ossowski (1963, cited in Heller 1969: 2) argues that there are two major views of inequality that pervaded and have been stated over the centuries: 1) those who approve of the existing social order, 2) those who question it. Given these complexity of the concept itself, it has led to diversity of accounts and perspectives among thinkers and scholars through time. It is possible here to trace every expression of thesis and antithesis from ancient times to the present but I will address some major accounts.

This study will basically focus on micro-level social inequality, rather than studying macro-level inequality that involves with inequalities among nations and regions reflected, for instance, in World System Theory (Kerbo 2003: 142; Grabb 2007: 203; Wallerstein 1974; 1980; 1989). In addition, due to differences in concerns and perspectives, social inequality has been also analyzed in many disciplines differently. In

this chapter I will overview approaches and scholarship on inequality in sociology, anthropology, and archaeology.

2.1. Sociology and Scholarship on Inequality

Pre-modern accounts

Overall, the history of social thoughts and ideas on social inequality can be categorized in three different perspectives. Although the history of scholarship on inequality and stratification is as old as sociology itself, ideas on the issue can be traced back to the Classical world (Heller 1969: 1-2; Tumin 1967: 1-4; Lipset 1968: 296). Early thinkers in classical period looked at inequality and class differences as social problems that should be cured. Each had his own ideas about inequality and envisioned a form of society that did not have social problems caused by it (Tumin 1967: 4).

Plato was one of the first philosophers to be concerned with justice, social stability and internal discipline within the society. He imagined a stratified society in which all citizens belong to one of three classes: the guardians, the auxiliaries, and the workers. Each of these strata was assigned certain functions. In Plato's idealized society, there would be no inheritance of class status and a perfect equality of opportunity would be provided for all. Although Plato's society is highly stratified, he also advocated the communal ownership of all forms of property, equality of opportunity, elimination of private property, and a ruling class whose concern is the common welfare. The mechanism of social mobility would be based on moral virtue, intellect, and knowledge. Equality in Plato's mind is only extended to material possessions and opportunities so that

honor and power is reserved for the ruling class of guardians and correspond to the inherent inequality of men. In this sense, Plato exemplifies the elitist position which envisions a utopian society in which all are best placed within a prescribed social class (Tumin 1967: 1-2; Heller 1969: 2; Lenski 1966: 5-6; Lipset 1968: 296). Plato advocated a stratified society in which stratification is meritocratic.

Unlike Plato, Aristotle sees the existing social order as naturally designed. He thinks that there are three classes in all states: very rich, very poor, and an average. Some men are free by nature, and others slaves; he advocates slavery by arguing that slavery is right and expedient (Lenski 1966: 5-6; Heller 1969: 2; Tumin 1967: 2). With different concerns, and about two thousand years later, Machiavelli (1469-1527) also addressed social positions, inequality in opportunities, and tensions between the elite and the masses. He argues that all humans are equal and the only thing that makes them unequal is poverty and richness (Viroli 1998: 66-67). For him inequality in status was legitimate so long as there was equal access to opportunities to reach elite status. In addition, inequality was, for him, one of sources of corruption, conflict, and unrest in society (Tumin 1967: 3; Machiavelli 1979: 224).

Thomas Hobbes (1588-1679) also addressed inequality. He argued that there was fundamental equality among all men (Tumin 1967: 3; Dooley 2005: 66). Using natural law and by natural implication, he criticizes Aristotle's notions and argues, "the question who is the better man has no place in the condition of mere nature, where (as has been shown before) all men are equal. The inequality that now is has been introduced by the laws civil". Further he argues that "if nature therefore have made men equal, that equality is to be acknowledged: or if nature have made men unequal, yet because men

that think themselves equal will not enter into conditions of peace, but upon equal terms, such equality must be admitted. And therefore for the ninth law of nature, I put this: that every man acknowledges another for his equal by nature. The breach of this precept is pride" (Hobbes 2008: 94-95).

He states that the inequality should be replaced by equality in power and privilege. Since all men desire power and privilege, in order to avoid a chaotic condition in society, there should be a set of rules or "social contract" by which they agree to abide. In Hobbes' envisioned ideal society there are no privileged classes because the equality of the rule provided by the sovereign will be corrupt (Tumin 1967: 3-4).

Jean-Jacques Rousseau (1712-1778) was the first social philosopher who provided a sociological statement about the social inequality since his work indicates a movement from a moral perspective to a sociological one in which he made a distinction between *natural* inequalities and inequalities in their *conditions of existence* (Beteille 1977: 3-4). Rousseau believed that there are two different types of inequalities among men; natural inequality and moral or political inequality. He states that natural inequality refers to inequalities based on "age, health, bodily strength, and the qualities of the mind, or of the soul"; moral or political inequality refers to those that depend on conventions and are connected to "different privileges". To Rousseau, "moral" or "political" inequality even has led to increase of natural inequality in humankind. He maintains that "from the moment one man began to stand in need of another's assistance; from the moment it appeared an advantage for one man to possess enough provisions for two, equality vanished; property was introduced; labor became necessary; and boundless forests became smiling fields, which had to be watered with human sweat, and in which

slavery and misery were soon seen to sprout out and grow with the harvests" (Rousseau 2002: 120).

To Rousseau, social inequality therefore originated from development of agriculture and metallurgy and introduction of private property (Rousseau 2002: 87, 111, 120; 1992; see also Beteille 1981; Fukuyama 2011: 28-29). John Locke also acknowledged natural inequalities and believed that all men by nature are equal but for him even subordination of the wife to the husband has a foundation in nature (Locke 2003: 101-106; Beteille 1981: 64).

From this brief review, one can see two dominant ideas about inequality or social hierarchy before the eighteenth century and the Enlightenment. Some early thinkers such as Aristotle, Machiavelli and Hobbes (Machiavelli 1979; Hobbes 2008) saw all types of inequalities as natural and thus self-evident but other thinkers such as Rousseau, Locke, and Tocqueville acknowledge both natural and social inequalities (Rousseau 1992; Locke 2003; Tocqueville 2010). On the other hand, in feudal Europe in the Medieval Period, there was another view in which social hierarchy is God's plan or Divine Order. In other words, social inequality was justified on religious and moral grounds (Bottero 2005b: 33; Shilling and Mellor 2001: 2; Lenski 1966: 8-9; Crompton 1998: 1-2; Offer 2010: 7).

Overall, inequality among pre-modern thinkers was seen as either a problem or social order originated from inherent differences, acquired differences, the legal codes, or combination of these (Tumin 1967: 4; Nolan and Lenski 2009: 276) (see e.g. Shoshan 2004: 163). Although none of these early thinkers analyzed the relationship between social inequality and material differentiations (the primary concern of archaeologists), it

is clear that they were all aware of it when they talk about properties and possessions, privilege, and power elite and their consequences.

Classic accounts

Among sociologists probably there are no more influential than Karl Marx (1818-1883) and Max Weber (1864-1920). Karl Marx did not consider himself a sociologist but his ideas, especially in political economy, got the attention of scholars of his time and after. His writings covered philosophy, history, economics, politics, and social sciences, but it was his focus on class structure and conflict that brought social inequality and stratification to the forefront in sociology (Shilling and Mellor 2001: 16; Claeys 2005: 441-449; Saunders 1990: 5-6; Wilk and Cliggett 2007: 94; Marx 1904). Although Marx did not address inequality directly, based on his writings and reconstruction of the concept of class, later Marxist sociologists addressed some of the same issues as stratification (Elster 1986: 123-125; Heller 1969: 7-8).

Marx argued that classes of people are defined by the kinds of property they hold and the kinds of work they do. Probably his most significant contention for archaeologists and anthropologists was that class struggle has been the basis for social transformation and inequality throughout history. Classes are in conflict with each other because they struggle for dominance and control with a consciousness of their position. He argued that unequal distribution of power and property in society leads to inequality and domination. Marx and Engels thought that all forms of inequality originate from private property and this is the "basic means by which surplus value is taken from some and accumulated by others". The system of inequality is maintained and protected by

two main mechanisms: the state and ideology. He held that the system of ideas or ideology, for instance religion, philosophy, and cosmology, rationalizes the economic system and social ordering and makes them sound natural (Wilk and Cliggett 2007: 95-99; Grabb 2007: 9-36; Tumin 1967: 4-6; Hurst 1995: 216-217; Barber 1968: 289-290; Kerbo 2003: 87-97).

For Marx, the capitalist social system is based on the exploitation of the many by the few. In turn, development in the economic base of the society and unequal distribution of resources lead to conflict and inequality in the social system. Ultimately conflict and inequality leads to crisis and to revolution and transforming the whole social system. To understand Marx's class and social transformation, there are a few key terms and concepts that should be understood, such as mode of production, social relations of production, surplus value, private property, and ideology and how he perceived these concepts (Marx 1976, vol. 3: 70-78).

Marx and Engels argued that all systems of inequality in earlier systems such as ancient, feudalist, and capitalist societies in his time, were ultimately based on private property as a basic means by which surplus value was taken from some by some others. To his, in every social systems there were two groups of people that opposed each other such as masters and slaves in ancient times, lords and serfs in feudalism, and the bourgeoisie and the proletariat in capitalist systems (Marx 1976, vol. 3: 70-78; Bottero 2005b: 34-35; Tumin 1967: 4-6; Wilk and Cliggett 2007: 96-97; Grabb 2007: 17-18; Lenski 1966: 11-12; Crompton 1998: 24-29; Hurst 1995: 214-223; Dahrendorf 1959: 4).

The second major social scientist who contributed significantly to understanding of social inequality is Max Weber (1864-1920). Like his predecessor Marx, Weber did

not provide systematic and detailed analysis of social inequality but it can be found among his analysis of capitalism, rationality, religion, value system, and moral economy. As Marx focused on the economic dimension of inequality, control over property, Weber focused on the dimensions such as power and prestige. Weber's treatment of these two concepts were subsequently important in theories of social inequality. Weber differed from Marx in several ways. Although Weber acknowledged the significance and consequences of property differences for life chances and opportunities, he also maintained that property was only one of three dimensions but interacting bases for inequality and stratification in any society, the others being power and prestige (Weber 1930: 3-13; 1994: 362-364).

Weber doubted in that class consciousness unites workers and also disagreed that class struggles were the main cause of social transformations. In addition to proposing multi-variate bases for social inequality and stratification, he also highlighted the role of relations between these bases and other factors such as religion in shaping peoples' status and hierarchy (Weber 1930: 3-13; 1994: 362-364; Tumin 1967: 6-8; Turner 1993: 35; Grabb 2007; Barber 1968: 290; Bottero 2005b: 38-39; Kerbo 2003: 97-104).

Weber's perspective on social inequality shows greater complexity and variability than the Marxist perspective. Power can be a basis for social honor, and in turn social honor or prestige may become the basis of political or economic power. His major conception of social inequality is that inequality is complex, conditioned, and with a pluralist nature. Each of the three bases of inequality are also complex, can take a variety of forms, and there is an interplay between them. For Weber, the bases are all interdependent and combined, for example "a class in a class society will be structured by

status and authority as well as by class relations, though the specifically class elements will prevail" (Scott 1996: 46). Power can be manifested in people's status, class and party. Contrary to Marx, Weber highlighted the significance of status groups rather than class and doubted that class struggle may unite and lead to a communal action (Grabb 2007: 41-42, 51-58; Hurst 1995: 223-231; Crompton 1998: 32-35; Heller 1969-25; Scott 1996: 20-47; Turner 1986: 61-65).

On interrelation of power, property, and prestige for instance Weber (1978: 926) argued that "economically conditioned power is not identical with power as such. On the contrary, the emergence of economic power may be the consequence of power existing on other grounds. Man does not strive for power only in order to enrich himself economically. Power, including economic power, may be valued for its own sake". With particular attention to the role of power among three bases of stratification, Weber introduced another key and interconnected concept that he termed 'domination'. When power is structured, domination of one group or individual emerges. "Stratification… concerned the social distribution of power, and this distribution of power involves the formation of social strata into structures of domination" (Scott 1996: 24).

Another of the three prominent of sociology, Emile Durkheim (1858-1917) also was not principally concerned with social inequality but some of his ideas are relevant for its analysis. His work can be seen as a bridge between classic accounts on social inequality and later perspectives on the social stratification (Grabb 2007: 66). The most significant mark of Durkheim on analysis of social inequality can be seen in his analysis of associative groups (Bills 2005: xix). Contrary to Marx and Weber, who focused on conflicts of interest among social groups, Durkheim was concerned with social order and

solidarity. Instead of social class and status groups, he characterizes modern societies in terms of occupational division of labor (Durkheim 1984; Grabb 2007: 66-67; Kerbo 2003: 105-109).

He reaches inequality as a social problem from a different point of view. If each person respects duties of others, and if everyone enjoys equal opportunities, and if each person takes the most appropriate position in the society that he or she deserves, then the division of labor is just and moral issue (Durkheim 1984). This is the normal form of society. Whenever and wherever "labour becomes increasingly divided as societies become more voluminous and concentrated, it is not because the external circumstances are more varied, it is because the struggle for existence becomes more strenuous" (Grabb 2007: 76-77).

Durkheim greatly inspired later socialists especially functionalist approaches in sociology and anthropology (e.g. role of gift exchange in building hierarchy in Mauss 1990: 95) since he stressed the significant role of value systems, shared beliefs, and norms that could function as an integrating glue. For him, increasing social differentiation brings people together, makes them interdependent, and creates organic solidarity. Thus, social stratification was a moral reality as a status ordering that reflects shared values (Bottero 2005b: 44; Lipset 1968: 305; Grusky 2005; Grabb 2007: 73-82).

Although Marx and Weber are considered major characters in sociology and studies of social inequality, the economist and social scientist Vilfredo Pareto (1848-1923) provided another perspective. Probably his major mark was on the circulation of

elites (Bills 2005: xix; Marshall 2007). His concern for the circulation of elite[3] stemmed from a general interest in social equilibrium that is a part of functionalist thought in sociology. He developed a ruling class theory that especially stressed elites. He is widely acknowledged for introducing the most appropriate terminology for describing ruling groups (Hurst 1995: 233; Hartmann 2007: 12-15; Scott 1996: 139).

Focusing on political power, he argued that there are "two strata in a population: 1) a lower stratum, the non-elite, with whose possible influence on government; then 2) a higher stratum, the elite, which is divided into two: (a) a governing elite; (b) a non-governing elite." He further argued that at the beginning military, religious, and commercial aristocracies were part of the governing elite (Pareto 1969: 35-37). The stability of a society, or a society in equilibrium, is highly dependent on the circulation of elites and the best circulation can take place only under a condition of a good competition (e.g. Pareto's Optimality and Efficiency in Johansson 1996; Thomas 1996). To him, every people is governed by an elite class, however, elites vary in composition that is depended on circulation or the degree of mobility from outside their ranks. Thus circulation plays a key role in the continual rise and fall of elites (Hurst 1995: 234; Scott 1996: 139; Marshall 2007: 10).

[3] According to theory of "the circulation of elites" some traits, mentalities, and actions among governing elites become predominant in gradational process over time that in turn pushes them especially the leaders to rigidity, bias, and closure. By the time and in a gradual process these general trends leads to decline and eventually to a radical transformation through which new groups take the power (Pareto 1969; Higley and Pakulski 2012).

Recent accounts

From mid-twentieth century, approaches to social inequality and stratification became more diverse. Inspired by classical sociologists such as Marx, Weber, and Durkheim, trends in theories of inequality and stratification such as functionalist approaches came to being. Although functionalist viewpoints can be traced back to August Comte and Herbert Spencer, structural functionalist approach as a new perspective in studies of social inequality more than anyone else was inspired by Durkheim in its formative stage. Structural functionalism first appeared in anthropology in the work of Alfred Radcliffe-Brown and Bronislaw Malinowski (Grabb 2007: 88-91; McGee and Warms 2004; Barrett 2009: 61-70). It was a dominant approach during much of the first half of the twenty century in anthropology, in sociology it only achieved prominence in 1940s in the work of Talcott Parsons, whose ideas were extended by Kingsley Davis and Wilbert Moore (Davis and Moore 1945; Parsons 1940; Barber 1968: 290-291; Grabb 2007: 88-90; Kerbo 2003: 117-131).

The argument of structural functionalists was that social stratification represents a functional and necessary element of any social system. Davis and Moore argued (1945: 242-243) that "as a functioning mechanism a society must somehow distribute its members in social positions and induce them to perform the duties of these positions. Social inequality is thus an unconsciously evolved device by which societies insure that the most important positions are conscientiously filled by the most qualified persons. Hence every society, no matter how simple or complex, must differentiate persons in terms of both prestige and esteem, and must therefore possess a certain amount of

institutionalized inequality." In this view, inequality and stratification is ubiquitous and antique because systems of unequal rewards are necessary (Saunders 1990: 59).

In general, they see any society is seen as a "system of parts that are interconnected [with norms and value systems] to form various structures, each of which fulfills some function for the system." It is important to note that structural functionalism completely ignores the existence of conflict among social strata (Grabb 2007: 89, 104) and the role of human agency in dynamics of social inequality.

Disagreements and dissatisfactions with structural functionalism led to the development of new perspectives on inequality and stratification in the second half of the twentieth century. Reactions to structural functionalism, especially after the leading critics such as Ralf Dahrendorf and Gerhard Lenski, led to renewal of old debate between Marxian and Weberian thought (Grabb 2007: 114-120). Dahrendorf maintained that neither Marxism nor structural functionalism is adequate in their analysis of social inequality. Dahrendorf and John Rex became two leading theoreticians of conflict theory (Dahrendorf 1959; Rex 1961). Dahrendorf first did an analytical separation of the theory of class formation (structure) and class action or class conflict (Dahrendorf 1959: 153). To him, social conflict as realities of social life had not been given enough attention by structural-functionalists. He argued that classes are social conflict groups and conflict is still an important factor in social changes that can also have some positive consequences. He also stressed that the inequality of power is a fundamental inequality (Dahrendorf 1959: 64, 138, 207-208; Grabb 2007: 121-122; Scott 1996: 159-162).

Following these dissatisfactions, another theory emerged, called social reproduction theory. Social reproduction theory mainly focuses on how social inequality

is maintained, reproduced from one generation to the next, transmitted, and perpetuated. In other words, it identifies barriers to social mobility. Based on early proponents of social reproduction theory such as Basil Bernstein, Bowles and Gintis, MacLeod argues that the "essential component of social reproduction is the process by which individuals in a stratified social order come to accept their own position and the inequalities of the social order as legitimate" (Bernstein 1971a; b; c; d; Bowles and Gintis 1976; cited in MacLeod 2009: 8, 11, 113; see also Hurst 1995: 249-253).

From an evolutionary perspective, Gerhard Lenski tried to provide a synthetic view of social inequality based on Marx, Weber, structural functionalism, and conflict theory (Lenski 1966: 17-21). Lenski proposed two very useful techniques in order to reformulate problems and concepts: 1) transforming categorical concepts into variable concepts, 2) breaking down compound concepts into their constituent elements (Lenski 1966: 21-22).

Lenski maintains that the level of social inequality in a society has close connection to the level of technology and the amount of surplus goods produced. The high level of technology leads to the greater amount of surplus goods and services. He further argued, "in the simplest societies, or those which are technologically most primitive, the goods and services available will be distributed wholly, or largely, on the basis of need… With technological advance, an increasing proportion of the goods and services available to a society will be distributed on the basis of power" (Lenski 1966: 46).

For Lenski, differences in power are the most significant factor in structuring social inequality. Power is multidimensional and derives from a combination of control

over coercion and access to conventionally sanctioned rights. Hence, power can lead to creation of various types of inequalities. In this sense concepts such as class, race, and gender are interconnected with analysis of power and enforceable right. It seems that much credit is given to the role of the state in Lenski's analysis (Grabb 2007: 132-133).

In his attempt to synthesize dynamics of distribution systems and following his earlier stresses on power, Lenski argued that power is "the probability of persons or groups carrying out their will even when opposed by others". Power is therefore a determining factor in distribution of surplus produced in a society. In addition, if privilege is seen "as possession or control of a portion of the surplus produced by a society, then it follows that privilege is largely a function of power, and to a very limited degree, a function of altruism" (Lenski 1966: 44-45).

Reactions to structural functionalism with the departure of Dahrendorf and Lenski resulted in a revival of Marx and Weber (Grabb 2007: 136; Martin 2008: 8). Among neo-Marxists, Nicos Poulantzas' work signifies a new shift in Marxist thought. Like many other neo-Marxists he sees class as a set of places that is filled by people, namely an "economic place of social agents", however, this economic place is not enough in determining social classes (Poulantzas 1975: 14).

Probably the most distinguished scholar among neo-Marxist scholars is Erik Olin Wright. Unlike Poulantzas and other Marxists who see power as a capacity inheres only in class relations (see e. g. Poulantzas 2000: 25-27), Wright acknowledges the existence of power or domination in non-economic and non-class forms. In this sense he swings to a Weberian approach, but the concept of class is still at the center of any analysis of social inequality in neo-Marxian account (Wright 1985; 2000).

In order to identify major classes which exist in a capitalist society, Wright combined Marxian and Weberian approaches and provided a new influential theory that describes three dimensions of control over economic resources: "1) control over investment or money, 2) control over the physical means of production such as land or factories, and 3) control over labor power" (cited in Giddens 2006: 303-304). Structured inequality leads to the establishment of exploitation and domination that in turn requires the continual active cooperation between exploiters, exploited, dominators, and the dominated. This interdependency shows an ongoing relationship between the conditions and also activities of the advantaged and disadvantaged. Further, Wright argues, power relations and institutional rules are shaped by class processes and class conflict (Wright 2009: 108, 110). Although, like Weberians, he acknowledges the critical role of the power, but contrast to them he considers it to be an outcome of class conflict and processes.

Other scholars inspired by Weber's ideas have developed neo-Weberian perspectives to provide a renewed account on social inequality. As one of the prominent neo-Weberians and a strong critic of Marxist perspectives, Frank Parkin (1979; 1969) considers power as the source of inequality and held that only a Weberian approach best explains manifestations of structured inequality. To Parkin, a general and continuing struggle for power is the sources of structured inequality. However, because in Weber's work the source and location of power is not clear, Parkin tried to fill the gap by appealing to the idea of social closure. By social enclosure he refers to various processes by which some social group seeks to maximize their rewards by monopolizing resources or restricting others from access to resources and opportunities, and also through

usurpationary acts to limit circles of people eligible for resources etc. Parkin, like Marxists, acknowledges that the property relations are the main means of class manifestation (Parkin 1979: 44-46; 1980; Grabb 2007: 163-166).

Neo-Marxists by this time were adopting a multi-dimensional viewpoint that was characteristic of the Weberian approach (Fararo and Kosaka 2003: 47). Two quips from two prominent scholars clearly indicate the overlaps between neo-Marxism and neo-Weberian approaches during the post war period. Frank Parkin noted that "inside every neo-Marxist there seems to be a Weberian struggling to get out" (Parkin 1979: 25) and Erick Olin Wright also indicates that "inside every left-wing Weberian there is a Marxist struggling to stay hidden" (Wright 2000: 32).

Inspired by both Marxian and the Weberian approaches, Anthony Giddens has developed his own perspective and approach, "structuration", to the analysis of social processes (Giddens 1973; 1984). Like Marxists, he accepts that ownership of property in the means of production is the main generator of the class system, but he takes a Weberian position and argues that differences in power among groups produces classes (Grabb 2007: 173-174). Instead of Marxian two class model, Giddens mixed both Marxian and Weberian notions and argued that “There are three sorts of market capacity which can be said to be normally of importance [in structuring classes]: ownership of property in the means of production; possession of educational or technical qualification; and possession of manual labour power. In so far as these tend to be tied to closed patterns of inter- and intragenerational mobility, this yields the foundation of a basic three-class system in capitalist society: an 'upper', 'middle', and 'lower' or 'working' class" (Giddens 1973: 107).

In this threefold model, social relationships arise among an upper class that controls property, a middle class that does not own property but have special skills to exchange, and a lower or working class that exchanges its labor power. Giddens also acknowledges that there are exceptions that do not fit into this threefold model. Hence, he introduced the idea of structuration in which economic relationships actually are rendered into non-economic social structures or social classes (Giddens 1973: 107; see also Grabb 2007: 174; Crompton 1998: 44-45). With regard to power, and contrary to Marx, Giddens argues that power is not necessarily linked to conflicts in interests and not necessarily oppressive. For Giddens (1984: 257), "power is the capacity to achieve outcomes". He does not see power as an obstacle to freedom. "The existence of power presumes structures of domination whereby power that 'flows smoothly' in processes of social reproduction operates." Giddens sees a close connection between power and domination. He shares with Weber the idea of power as capacity and domination as a "structured manifestation of power" (Giddens 1981: 50-52). He further elaborates this and argues that two aspects of domination are significant in the structuring of social systems: property (allocative resources) and authority (authoritative resources) (Giddens 1981: 52). Giddens then outlines four types of institutions that are connected to social structure and inequalities: 1) political institutions are concerned with authorization or domination of people, 2) economic institutions are concerned with economic structure and allocation or material phenomena, 3) symbolic orders/modes of discourse are involved with religion, education, and communications media or ideological apparatuses, 4) law and modes of sanctions involved with legal, military, etc. although this could be included in political institutions (Giddens 1981: 47).

By the time, analyses of social inequality and stratification were overshadowed by class analysis particularly because class analysis focused more on material inequality (Bottero 2005a: 56; Devine 1998). Class analysis was criticized for ignoring "collectivities of people who share identities and practices" and for ignoring the fact that in gradational social micro processes classes are produced, reproduced, and perpetuated (Devine 1998: 23, 33).

In the past two decades there has been a growing body of literature that argues that class is no longer relevant to current situation in the world. Postmodern scholars argue that class in the Marxist and Weberian tradition is useful category in analyzing social structure. They argue further, however, that social inequality is being manifested on gender, ethnicity, sexuality, global inequality and is not relevant to the age of "Individualization", post-industrial situation, age of citizenship, age of consumptions etc. (Pakulski 2005; Beck 1992; Crompton 1998: 127-134; Pakulski and Waters 1996b; a; Beck 2007). They argue that "class is dead, and new identities have arisen" (Lee and Turner 1996; cited in Scott 1996: 2). However, many social scientists still believe that class relations have not disappeared and still relevant to social analysis today.

Rejecting the argument of the death of class, "social distance approach" calls for renewal of class analysis (Bottero and Prandy 2003: 183; Bottero 2004). This approach has a very close relationship with Pierre Bourdieu's "social space" approach (Bourdieu 1984; 1985; 1987). Acknowledging earlier studies and their emphasis on processes such as conflict or competition, subordination and exclusion, social distance approach also argues that con-conflictual or positional processes also contribute to production and reproduction of social inequality and stratification. For instance, although the choice of

friends or marriage partners may be part of a competitive process, it also considers that equally it is "the process in which people wish to partner with status equals, preferring to marry those individuals whose status position, tastes, and lifestyle are similar to their own – the 'like me' hypothesis." In this approach, differences in lifestyle or taste etc. are not only considered the source of social exclusion, rather are explained also as manifestation of social distance. "The central argument of social distance approaches is that if such different sets of relationships reproduce the same social ordering, then we need to rethink the nature of inequality and how it is structured and maintained. In particular, it is important to understand the interrelationships of economic, social and cultural elements" (Bottero and Prandy 2003: 192-194).

In addition to highlighting the relational and behavioral aspects of social inequality (see Berreman 1981a: 4), social distance approach opens up discussions on gradational social distance and the role of "association" and "occupational" relationships in production and reproduction of social inequality (Bottero and Prandy 2003; Bottero 2005a) which can be helpful in analysis of group dynamics, cooperation, collective identity and ultimately helpful in analysis of social differentiations (see chapter 6).

2.2. Anthropological Scholarship on Inequality

Along social scientist, sociologist, and social philosophers, anthropologists have also addressed social inequality. However, there are other issues with inequality that have been neglected or at least under-studied by other social scientists, for instance, the origin(s) of social inequality. Anthropologists in all over the world and through their

fieldwork among living societies have tried to scrutinize origins and primary causes of social inequality. Contrary to sociologists, they engaged more with agrarian, tribal, pastoral nomad, colonial societies, which have tended to be less-complex than industrialized and modernized societies. The other issue is the typology of societies that are heavily affected by the development of social inequalities and stratification systems. In regard with social inequality and stratification, anthropologists were very engaged with its origins, typology as a developmental or evolutionary scheme, identification of evolutionary processes through which societies and cultures developed (Berreman 1981a: 6).

Anthropologists were involved with the study of social inequality at both macro and micro levels more than any other disciplines. Social inequality in anthropology provides the basis for analyzing the whole structure of any society; it is tied to concepts of social complexity, evolutionary process of societies, and it leads to classificatory approaches to societies, tribes, groups, and people (Arnold 1996b: 1; see e.g. Ames 2010). In other words, social inequality for anthropologists is about architecture of society and serves as a means to speculate and make inferences about structural aspects of society (McGuire 1983). The key questions for anthropologists and archaeologists in their research are what kind of society they are looking at, what the largest social unit and its scale is in that society. Obviously social inequality is a promising point to start since these questions drive them to classification of societies (Renfrew and Bahn 2008: 178).

One of the main differences between societies is in the degree and extent of inequality and to the extent to which inequality is institutionalized (Gosdon 1999: 91; Parsons 1966: 47; Kurtz 2001: 142; Service 1975; Fried 1974; 1967). In this sense, study

of inequality in anthropology intersects with various concepts that differ from those in sociology. Moreover, it also corresponds with global or multinational approaches to inequality in sociology, otherwise known as World Systems.

Above all, motives of anthropologists in studying social inequality are different from that of sociologists and other social scientists. These differences between anthropology and sociology and other social sciences have led to different trajectories in scholarship. Inequality has not been in the center of the anthropological enterprise for decades, however (see e.g. Tilly 2001). In contrast, social inequality, its forms, and consequences have kept their centrality in sociological research and discourse. Here I will review briefly the analysis of social inequality by anthropologists since the late nineteenth century.

The dominant perspective in the early decades of professional anthropology, especially during the second half of the nineteenth century, was an evolutionism that was highly influenced by social Darwinism. Among early anthropologists, Edward B. Tylor (1832-1917), Louis Henry Morgan (1818-1881), and Herbert Spencer (1820-1903) were particularly prominent. Evolutionism paved the way for later achievements in the discipline by removing the prevailing supernatural and theological explanations of human origins and the idea that social life is without regulation and pattern. The basic conception in evolutionism was that society and culture like nature is subject to the same laws (application of natural laws to social problems) such as struggle, competition, adaptation and also it moves in a unilinear scheme and in this sense progress is inevitable (McGee and Warms 2004; Barrett 2009: 49-54; Trigger 2006).

From the beginning, anthropologists were involved with typology and the classification of societies. For this reason, the analysis of social inequality has intersected with the study of the evolution of societies from simple to more complex. For instance, Tylor (1896: 434-435) as one of the pioneers of the discipline, argued, "as society in tribes and nations became a more complex system, it early began to divide into classes or ranks. If we look for an example of the famous first principle of the United States, 'that all men are created equal,' we shall in fact scarcely find such equality except among savage hunters and foresters, and by no means always then. In all communities, except the smallest and simplest, the freemen divide themselves into ranks." Louis Henry Morgan (1877: 344), who inspired Karl Marx and Friedrich Engels in their ideas about property and mode of production , sees social inequality, especially unequal access to privilege and power, as a source of corruption in society that may lead to destruction of both government and people.

Herbert Spencer also was concerned about class differences and social justice in his time, for him social inequality was understood and tied with equality. "Spencer then substitutes for the reference to inequality the idea of a positive element in justice, and substitutes for the reference to equality the idea of a negative element. Thus, for Spencer, a satisfactory, evolution-based law of life formulation of justice must unite positive and negative elements in respect of each and every person" (Spencer 1910; cited in Offer 2010: 288).

Reactions against evolutionism led to an anthropological trend during the first half of the twentieth century that later was named historical particularism and which became the dominant anthropological perspective in America (McGee and Warms 2004:

129; Barrett 2009: 54-55). The most prominent scholar in historical particularism, and also the founder of American anthropology, was Franz Boas (1858-1942).

Boas' students, and anthropology after him, was mostly involved with personality formation in culture and the significance of individuals to anthropology (Wolf 2001: 68; McGee and Warms 2004: 131-132). Nonetheless, Margaret Mead carefully recorded inequalities in her ethnographic accounts. In her accounts of social stratifications among native communities, especially regarding leadership among chiefs of tribes, sometimes she sounded a functionalist scholar. She often highlights functional aspects of stratification such as reinforcing cooperation and creating cooperative unities (Mead 1937: 443, 496).

Boas and his students, in general scholars of historical particularism, did carefully record evidence of social inequality among indigenous living societies of their time but almost none of them were engaged with conceptualizing it and building a theory of inequality. The concept of social inequality among scholars of historical particularism is often interconnected with race and racial issues. Concepts such as social inequality, hierarchy, and racism were implicit in Boasian relativist anthropology (Frank 1997; Lewis 2001a; b; Darnell 2008: 45; Moore 2009b: 39). Explicit concern about social inequality among anthropologists of first half the twentieth century may be seen only in Robert H. Lowie's *Primitive Society* (1920) in which he systematically addresses social inequality and its evidence in living indigenous societies and showed that they were far more varied than what has been thought before (cited in Barnard and Spencer 2002: 456; Beteille 1994: 1012).

In the first half of the twentieth century probably one of significant contributions of anthropologists to studies of social inequality was provided by Ralph Linton (1936). He is one of anthropologists who contributed to clarifications and precisions in terminologies in social sciences. In order to explain the patterns of behavior in human society, he developed the concepts of "status" and "role." To Linton (1936: 113) "a status is a position in a particular pattern. It is thus quite correct to speak of each individual as having many statuses, since each individual participates in the expressions of a number of patterns. A status, as distinct from the individual who may occupy it, is simply a collection of rights and duties." Individual in different statuses are expected to play a role. Status indicates our relative social position within a group and is a means to differentiate individuals and groups of people in hierarchical order of a particular society (Middleton 2008: 621; Zelditch 1968; Sarbin 1968; Banton 1996).

To Ralph Linton (1936: 114) role is a means of analyzing social statuses. "A role represents the dynamic aspect of a status. The individual is socially assigned to a status and occupies it with relation to other statuses. When he puts the rights and duties which constitute the status into effect, he is performing a role. There is not roles without statuses or statuses without roles." In other words, Role is a complex of expectations or the part our society expects us to play in a given status. It should be added that in this sense, role is a complex set of expected behavior associated with a social position or status and it is not a position by itself (Banton 1996; Sarbin 1968; Zelditch 1968).

In Europe, a combination of French structuralism and British functionalism led to approaches different from anthropology in the US. In Britain, reactions to evolutionary perspective did not end up with the same path that was dominant in America. With

influences and fertile ground provided in work of Emile Durkheim, anthropologists such as A. R. Radcliffe-Brown and Bronislaw Malinowski directed the discipline to a narrower path that is so-called structural-functionalism and sometimes functionalism (Barnard 2004: 61-62; McGee and Warms 2004: 153-156; Lesser 1935; Radcliffe-Brown 1935: 395). As Radcliffe-Brown states "as the word function is here being used the life of an organism is conceived as the *functioning* of its structure" (1935: 395). Concerning inequality, especially in terms of privilege, Radcliffe-Brown considered it “machinery” to keep the structure of lineage, clans, and moieties [in a living indigenous culture] (Radcliffe-Brown 1952a: 198). The Structural-functionalist approach makes analogy between a biological organism and society so that all the institutions and roles in the society are interconnected with functions without which society would lose its integration. For instance, in the case of economic institutions, Radcliffe-Brown suggests that we should look at the issue from two different angles “1) they should be viewed as a mechanism that manages economic relationships, activities, and production processes, or 2) they should be viewed as a set of relations that maintain the exchange or circulation of economic products and services” (Radcliffe-Brown 1952a: 198).

Among structural-functionalist anthropologists, Bronislaw Malinowski also contributed tremendously. Malinowski's work does not treat the origin of inequalities among societies in which he lived and did his ethnographic research. However, he deals extensively with hierarchies and inequalities among individuals and social institutions concerning their function in the society. Making analogy between the human body and society, he explicitly recommends a functional approach for anthropological research, because society is a coherent and integrated system. Social hierarchy, which is based on

unequal access to control and privilege, is functional and is a basis of social order, for instance in order to exclude some people from access to goods and privileges. In his emphasis on functional aspects of social institutions, mechanisms, and relations, he relies on the theory of need that links individuals and institutions to the society because society exists to meet the needs of the individual (Malinowski 1945: 45; 1960: 83, 120, 127; see also Thornton and Skalnik 1993: 50, 204; Moore 2009b: 134-135, 139, 145; Piddington 1957).

Until mid-twentieth century anthropologists did not pay substantial attention to conceptualizing issues such as social inequality, hierarchy, stratification, and social class. Moreover, when they did, they used terminologies different from sociology. In other words, although during this time they studied social inequality and sometimes various forms of inequality in their ethnographic studies, with a few exceptions (Lowie 1920; e.g. Drucker 1939) it was almost neglected in anthropological theory. When it was addressed, it was mostly related to other issues that concerned anthropologists. During this period social inequality never became a main concern in anthropological thought (see e.g. Beteille 1994; Job 2006: 2099).

Anthropologists in the first half of the twentieth century were mainly involved with ethnographic research in living cultures around the world, kinship, their belief systems and rituals, personality building, norms and regulations in these communities, ceremonies, customs, and social/economic institutions. One reason might be the fact that most anthropologists, especially in Boasian tradition, mainly focused on non-stratified or less stratified communities in their fieldwork and researches. Toward the mid-twentieth century, especially in the 1950s, social stratification as an institutionalized form of

inequality became a major concern for dominant approaches in anthropological thought of the time, such as cultural ecology and neo-evolutionism under influences of Marxism (Barnard 2004: 87). This is partially because of political context of the time that we can see influences of Marxist thought on the work of prominent anthropologists such as Leslie White and Morton Fried (McGee and Warms 2004: 239; Barnard 2004: 40, 87; Kurtz 2001: 116-119, 123-125; Peace 2004).

Concerning social class and hierarchical division of society, Leslie White considered "chronic" warfare as one of the major sources of stratification or class. In a Marxist tone, White sees technological means of subsistence as underlying any social system. Military offence and defense with technological means can be a powerful and determinant in social organization. Analyzing social consequences of warfare, he argues that the formation of professional military 'class' may lead to subordination of masses at home and creation of slaves or serfs constituted by conquered people. Hence, for White, warfare divides society into two major classes; one small ruling class and large subordinated mass (White 1949: 376, 380). To him, "every social system rests upon and is determined by a technological system. But every technological system functions within a social system and is therefore conditioned by it" (White 1949: 382). Relying on technology, White developed a materialist explanation of cultural evolution with a unilinear approach (Moore 2009a: 187-188; Johnson and Earle 2000: 4; Moore 2009b: 179-193).

In contrast, Julian Steward assumed a multilinear evolution for human societies (Service 1975: xvii; Moore 2009a: 209; Johnson and Earle 2000: 5; McGee and Warms 2004: 237-238; Lamberg-Karlovsky and Sabloff 1979: 35-37). He argued that

agriculture in an arid or semiarid region can only be carried out by irrigation systems in flood plains. Construction of irrigation canals and distribution of water into agricultural fields also necessitated management, bureaucracy, and control, which in turn led to emergence of political controls and ruling class. He then assumed that early societies were very religious and most likely priests or shaman formed a ruling class (Steward 1949: 22-23; 1955).

With some differences, Steward's explanation is similar to Karl Wittfogel's Hydraulic hypothesis (Wittfogel 1957; 1974). Emphasizing the role of adaptation to environmental conditions, technological change, and population pressure as underlying factors, Steward regarded internal needs in densely populated areas as leading to specialization in occupation and social groupings (Steward 1949: 24).

Marshall Sahlins is probably the scholar who looked at the concept of social inequality the most closely. The theoretical direction of his PhD dissertation was social stratification, and he worked on stratification in Polynesia (Sahlins 1958). As one of the students of Leslie White, he was also inspired by Marxist perspectives in anthropology and especially later in economic anthropology (Barnard 2004: 40, 90). Sahlins argued that there is a relation between the degree of food surplus productivity and stratification. Social organization, in this sense social stratification, is therefore highly dependent on the basic adaptation of culture or environment and technology (Moore 2009b: 368).

Sahlins (1958; 1969) thinks that the degree of stratification in societies is closely related to the extent to which status classes exist. Stratified societies differ from egalitarian ones in that status is determined by qualifications other than universals such as age, sex, and personal characteristics. Taking a substantive position, Sahlins states that

definition of class, which prevails in sociology, is not applicable to societies of the 'primitive' order. In order to measure the degree of stratification in a kin-based society, he provides criteria such as structural criterion ("the degree of status stratification") and functional criterion ("the degree to which rank confers privilege"). Functional criteria also can be divided into three groups: economic, sociopolitical, and ceremonial (Sahlins 1969: 240-241).

Sahlins argued that unequal access to power, privilege, and prestige is achieved through a process of distribution of goods. In 'primitive' societies, there are mechanisms that are appealed to in order to gain unequal access to desired power and prestige. Among these mechanisms are reciprocity, generosity, and gift exchange that can pave paths to power (Sahlins 1969: 241; Sahlins 2004: 131-148, 185-215; Sahlins 1958: 1-10).

Distinctions found between societies with household economy that produce "need-serving" goods and societies in which there is a regulation and distribution of goods. Interestingly this distinction corresponded with the social differences as well. In the second type of society, which is still kin based, the interest of the headman in the process of distribution is grounded in kinship. Those goods that are not consumed by the producers, or “strategic goods”, are accumulated and redistributed by chiefs. Differences in supervision of production, control, and inspections are ways that the headman may control the process of distribution. The headman may exert pressure on households to produce surplus, which may lead to more labor division, cooperation in public projects, and ceremonial and military action (Sahlins 1958: 248-249; 1963: 300).

Generosity leads to the creation of commitment (see e.g. Mauss 1990; Wilk and Cliggett 2007: 153-175) and whoever is generous and liberal gains general esteem.

Generosity and reciprocity, when they take place in a situation of economic imbalance, became key for rank and leadership. "The economic relation of giver-receiver is the political relation of leader-follower" (Sahlins 2004: 133, 207-208). Hence, in the field of kinship, mechanisms such as reciprocity and generosity may pave paths to power and prestige that in turn and long run may lead to hierarchical society.

Like Sahlins, Morton H. Fried was also concerned with social inequality in a sense that he could analyze evolutionary stages of societies. He proposed an evolutionary model in which societies evolved from egalitarian to ranked, stratified, and state level (Fried 1967; 1974: 27). To Fried, the degree of social stratification is the major difference between each of these stages and in relation to the control and distribution of resources, the key is the evolution of social stratification itself. In Fried's evolutionary model, social status, access to resources, and organization of power are at the core and play critical role in transformation of societies. The question of origin of social stratification is involved with the process by which "basic resources were converted from communal to private property" (Fried 1967: 191).

Relying on social inequality and the degree of social stratification Fried proposed a three-fold typology of egalitarian, rank, and stratified societies (Fried 1967; 1960). A rank society, Fried argues, is one in which there are a limited number of positions with valued statuses that are desired by talented people (Fried 1967: 109). Social stratification comes later and corresponds with the state level society. To him, it is impossible to imagine a state level society without social stratification. He indicates that "once stratification exists, the cause of stateship is implicit and the actual formation of the state is begun, its formal appearance occurring within a relatively brief time" (Fried 1967:

185). Following Marxist approaches, To Fried, social stratification emerges out of an attempt by ambitious and greedy individuals who want to take more advantage of surplus and abundance in production. Therefore, for Fried, the emergence of social stratification out of institutionalization process of social inequality is indeed a political process (Johnson and Earle 2000: 7).

Elman R. Service took almost the same path in neo-evolutionism. Along with Marshall Sahlins, he tried to reconcile approaches of Julian Steward and Leslie White by proposing that there were two levels of evolution; general and specific evolution (Sahlins and Service 1960: 43; Trigger 2006: 389). They developed a notion according to which evolution can take two directions. First, a general direction which is responsible for progress, but a second specific direction generates diversity and capacity for adaptation (Sahlins and Service 1960: 12-13). Service developed a four-stage typology in which societies are classified into band, tribe, chiefdom, and state level. More than dynamics and causes of transitions from one stage to another, Service was concerned with political composition of the stages (Service 1962; 1975).

Regardless of some critiques, the evolutionary models of Fried and Service was widely used and cited by scholars especially archaeologists (Kohl 1984: 128; Johnson and Earle 2000: 6; Haas 2001: 8). Service indicates that in an egalitarian society, personal qualifications and characteristics are key factors in formation of status and positions are based on personal qualities. Such a society lacks formal authoritative offices and laws (Service 1975: 50, 54). In question of "how does personal power become depersonalized power, corporate and institutionalized?", Service sees the answer in the origin of inequality. To him, personal power through mechanisms of heredity can

be established and institutionalized. In this process, offices of power are formed which then lead to hierarchies of offices. In the long run, social stratification came to being. He emphasizes on *offices* as a graded hierarchy and related jurisdictions "that is posts instituted to insure their continuity beyond the period of the competencies of the individual incumbents." Therefore, to Service, personal inequalities takes a hereditary form and then leads to formation of *offices*. If a hierarchy of offices is formed and intergenerationally transmitted, then permanent social strata come into being (Service 1975: 71-72, 293-296).

Service (1975: 291) criticized the notion that economic inequality lead to the development of political power structure. Rather he maintained that power is the origin of institutionalized inequality and social stratification. In egalitarian or segmented societies, there is the potential for individuals to be exalted. In these societies people "follow war chiefs, accept advice from wise men, and believe in the unequal access of persons to supernatural power. And this proclivity sets the stage for more permanent hierarchies of differential power. There are political 'jobs' to be done in any society, however small and segmental it may be, for there are always problems and fears of great magnitude."

With a functionalist perspective, Service argues that a leader may therefore arise, with ability and luck, to take charge and save the society from what are thought to be dire consequences. He even may combine war leadership with general wisdom to achieve such overall eminence that he becomes a mediating and administrative leader in peacetime. His successes could therefore result in considerable exaltation of his status in the minds of his followers (Service 1962: 143-152). Therefore, to Service, leaders who

enjoyed an unequal access to power, emerged because it was necessary for the community. People granted leaders to more power than other members of the community because of the functionality of those particular leaders (Johnson and Earle 2000: 7).

Roy Rappaport is another anthropologist who contributed to the studies of social inequality and stratification. He takes a cultural ecology approach and also is a critic of functionalism. Concerning social stratification, in his *Pigs for the Ancestors* (1968) the centerpiece is ritual as another factor that is not regulated but could have been a regulator in human society (Rappaport 1999: 323; see also Barrett 2009: 92-94; McGee and Warms 2004: 316-329).

Criticizing Marshall Sahlins' *Social Stratification in Polynesia* (1958), Rappaport (1979: 22) argues that "if advantages of centralized management by superordinate authorities form one of the grounds of social stratification, social stratification was not likely to emerge out of the exploitation of the reef, the lagoon, and the sea by atoll populations. If, on the other hand, control of resources or extractive activities is also prerequisite to the development of social stratification, it is unlikely to develop on coral atolls because marine species are subject to no more than the most limited control, and the same may be said for the activity of fishing. The exploitation of marine resources in the Pacific neither establishes a need for social stratification, nor does it provide opportunity for its development."

Rappaport (1979: 60-61) indicates that in Sahlins' work the discussion on relationship between social stratification and productivity or surplus is brought to circularity. In the one hand, productivity which results in surplus depends on chiefs as an aspect of social stratification, on the other hand, formation of stratification is highly

depended on productivity and whether there is surplus to be controlled and redistributed by chief.

To solve the problem of circularity, Rappaport shows that ritual cycle is a sacred structure that could have regulated the mode of production, because ritually structured societies are not depended on existence of social stratification or even ranking. Even after social stratification is formed based on control over resources, authorities keep relying on their sanctity which itself is intertwined with ritual (Rappaport 1979: 73, 197). Significance of ritual is more elaborated by Rappaport:

> Ritual is unique in at once establishing conventions, that is to say enunciating and accepting them, and in insulating them from usage. In both enunciating conventions and accepting them, it contains within itself not simply a symbolic representation of social contract, but a consummation of social contract. As such, ritual, which also establishes a boundary between private and public processes, thereby insulating public orders from private vagaries (and vice versa) is *the* basic social act (1979: 197).

Rappaport indicates that the roots of social inequality sometimes can be traced to the ritual. On the one hand, differential participation in ritual leads to unequal access to sacred and sanctified, on the other hand, to unequal access to construction, maintenance, and modification of meaning and values in general. Therefore, ritual participation provides a ground that social inequality may emerge (Rappaport 1999: 331).

In the same way, Frederick G. Bailey indicates how rituals and religious structure could have been behind the social inequality and caste system in India (Bailey 1960; 2001b). He indicates that while ritual and religious structure seems to be supportive of the caste system, actually it is interconnected with political and economic structures that all together constitute the context in which the caste system come to being and endures. Exclusion and monopolizing were probably mechanisms used in rituals to gain and maintain inequality and hierarchy (Bailey 2001b: 27-28; 2001a: 83). Aside but related, some social phenomena such as rituals, ethics and morality with even the apparatuses like 'fairness' can be sources or generators of inequality in a particular society (see e.g. Humphrey 2012).

Based on cross-cultural comparisons, Gerald D. Berreman (1981b) also contributed to the analysis of social inequality and stratification. Following Lloyd A. Faller's argument about multiple dimensions of social inequality (Fallers 1973 cited in Berreman 1981a), Berreman argues that social inequality is "(1) a behavioral phenomenon, in the sense that people act on their evaluations; (2) an interactional phenomenon, in that these actions occur largely in the context of interpersonal relations; (3) a material phenomenon in that their actions entail differential access to goods, services, and opportunities; and (4) an existential phenomenon in that people experience their statuses and respond to them cognitively and affectively" (Berreman 1981a: 4). When inequality becomes institutionalized it refers to a hierarchy of statuses that are not based on personal characteristics or qualifications. In this sense the society is identified as rank society and characterized by ranked organization of inequality. However, rank

societies could be categorized into two modes of kin/role ranking and stratification (Berreman 1981a: 9).

To Berreman, in a kin/role ranked society ranking of people depends on their position in the kin system. It may also depend on the role that kin plays within the society. Chiefdoms usually were characterized by kin/role systems that are known through ethnographic researches in different regions of the world. This mode of rank societies is usually involved with non-agricultural, small-scale agriculture, and pastoral economies. In contrast to kin/role rank societies, stratified societies are state organized and usually characterized by large-scale agriculture and surplus-generating animal husbandry. Berreman indicates that the main differences between these two modes of rank societies is in types of social organization and particularly in types of social inequality (Berreman 1981a: 9-10).

2.3. Approaches to Social Inequality in Archaeology

In almost all anthropological and archaeological work, the degree of institutionalization of social inequality, or to the extent that it is structured, has become one of the main factors according to which scholars make inferences about social structure and organization. Analysis of social inequality is found at the core of all evolutionary studies of societies and is also one of the key elements in the analysis of social complexity (Flannery 1972; Johnson and Earle 2000; see e.g. Arnold 1996a; Price

and Feinman 1995; 2010a; Chapman 2003; Diehl 2000a). Although social inequality has been addressed by numerous archaeologists for decades, has been at the core of all evolutionary studies of societies, and has been inevitable to look at in any analysis of social complexity, nonetheless it has been one of the most difficult and ambiguous issues to approach and examine. Until two decades ago, it was not discussed or analyzed directly in archaeological literature (Feinman 1995: 255-256).

Theoretically there are few differences between anthropologists and archaeologists in analyzing social inequality. In practice, however, because of significant differences in the nature of their data, archaeological research into social inequality differs considerably from anthropological research. In contrast to sociologists, who usually have more complicated definition of social inequality (see e.g. Grabb 2007: 2), anthropologists and archaeologists have used very simple definitions. By social inequality they refer to unequal access to goods, wealth and property, power, and prestige which determines persons status and social position (Price and Feinman 2010b: 2; Fried 1967; Flannery 1972: 414). Given the critical place of social inequality in determining status of people vertically in their society, it is the basis for hierarchy and social stratification.

Most of the effort by archaeologists and anthropologists has been directed at the analysis of the origins or causes of social inequality. For a long time, the Marxist and ecological perspective of Leslie White (1943) has been probably the dominant view in understanding of early stages of institutionalization of social inequality. White gives a major role to agriculture. To him agriculture is origin of almost all components of complex society including institutionalized social inequality. White argues that:

> The sequence of events was somewhat as follows: agriculture transformed a roaming population into a sedentary one. It greatly increased the food supply, which in turn increased the population. As human labor became more productive in agriculture, an increasing portion of society became divorced from the task of food-getting, and was devoted to other occupations. Thus society becomes organized into occupational groups: masons, metal workers, jade carvers, weavers, scribes, priests. This has the effect of accelerating progress in the arts, crafts, and sciences (astronomy, mathematics, etc.), since they are now in the hands of specialists, rather than jacks-of-all-trades. With an increase in manufacturing, added to division of society into occupational groups, comes production for exchange and sale (instead of primarily for use as in tribal society), mediums of exchange, money, merchants, banks, mortgages, debtors, slaves. An accumulation of wealth and competition for favored regions provoke wars of conquest, and produce professional military and ruling classes, slavery and serfdom. Thus agriculture wrought a profound change in the life-and-culture of man as it had existed in the human-energy stage of development (1943: 343-344).

The ideas of White and then Steward were widely influential and prevailed in archaeological literature for a long time. However, dissatisfaction with ecosystem approach and also with Fried and Services' evolutionary typology of human societies led to departure from those ideas (Redman 1978; Johnson and Earle 2000 [originally published in 1987]; Flannery 1972; see e.g. Adams 1966; Brumfiel 1992; Paynter 1989). Now archaeologists acknowledge multiplicity of origins, diversity of mechanisms of social inequality, institutionalized inequality, multi-linearity, and complex of variables that contributed to the evolution of human through complex and state level societies.

Probably one of the earliest dissatisfaction with "agricentrism" appeared in Adams (1966) and Flannery's work (1972).

To Flannery (1972: 402-403), it is hard to detect social inequality in tribal societies since hereditary social inequality appeared in chiefdom societies. He argues that lineages are involved with property-holding and this is the phenomenon that is detected in chiefdom societies. The fact that best agricultural lands are usually owned by the highest ranking lineages indicates interconnection of heredity and social inequality. High-ranking members in a chiefdom society usually maintain their status through possessing sumptuary goods. Regarding the question of how archaeologists could detect evidence for heredity and hereditary social inequality, Flannery suggested that one of the proxy materials usually used by archeologists is appearance of burials of infants with rich grave goods.

In a state level society, social inequality is institutionalized, no longer dependent on kinship and lineage, and social stratification has come to being. Power and force is a state monopoly and the elites of the society usually enjoy unequal access to strategic goods and services. When we look at possible origins, causes or proposed prime movers of formation of state level society summarized and listed by Flannery such as irrigation, warfare, and trade (Flannery 1972: 405), one may wonder whether some of these prime movers have their roots already in institutionalized inequality. Moreover, the prime movers could have been generators of more intense social inequality. Referring to Price and Feinman's *Pathways to Power* (2010a), I would argue that if the pathway(s) to power and state formation is institutionalization of social inequality and structuring society

hierarchically, then the creation of social inequality is the first step to take those pathways (refering to Flannery and Marcus 2012).

In sociocultural evolution, Allen Johnson and Timothy Earle (2000: 2) consider social stratification as another significant evolutionary stage that is detected in the development of all complex societies in the world, along with subsistence intensification and political integration as evolutionary processes. Although "population growth and technological advances are ever-present possibilities", they draw our attention to correlation between population pressure and rise of leaders in societies.

They argue that as population grow, scarcity of resources lead to an increase in competition for resources. People clustered together to defend themselves and their possessions. In order to defend themselves, get large scale communal projects done, and organize alliances, leadership becomes inevitable (Johnson and Earle 2000: 13-14). Here population growth and scarcity of resources intersect with the warfare, which by itself is considered as one of the causes of formation of political leadership and state formation (see Carneiro 1970; Keeley 1996: 26-32; Carneiro 1978). Johnson and Earle (2000: 16) indicate that they see war not as a phenomenon but rather as a "varying expression of aggression in varying institutional settings".

In addition, subsistence and political economy is considered another sources of power and institutionalization of social inequality. When production exceeds subsistence boundaries, political economy begins. Johnson and Earle (2000: 22-27) argue that while the subsistence economy is involved with meeting household needs, political economy is engaged with maximizing production and directing it toward use by the ruling elite, which "is growth-oriented in a highly competitive political domain and thus inherently

unstable", and in this sense in contrast to the subsistence economy. They maintain that under such conditions, commoners' options in economic activities become circumscribed, with little room remaining for them outside of the realm of the political economy. Therefore, scarcity or lack of opportunities for commoners becomes a suitable ground for opportunities for elites wherein they can gain more power, get control over resources, and ultimately for self-aggrandizement.

While on the one hand political economy provides a ground for ruling elites to have unequal access to material resources and power, on the other hand, intensification as a mechanism to meet the needs in subsistence economy also leads to a situation in which larger groups appear so that leaders are entailed (Johnson and Earle 2000: 28-32). By emphasizing on socioeconomic integration, Johnson and Earle proposed a new evolutionary typology, including (a) the Family-Level Group, including the family/camp and the family/hamlet; (b) the Local Group, including the acephalous local group and the Big Man collectivity; and (c) the Regional Polity, including the chiefdom and the state" (Johnson and Earle 2000: 32).

Ethnographic studies of Daryl K. Feil (1987 cited in Johnson and Earle 2000: 133-136) in the highland New Guinea indicates that in the Local-Group societies, leadership as one of the aspects of social inequality exists and plays a great role in their communities. It is indicated that evolution of leadership is circumscribed by agricultural intensification that leads to increase in competition and warfare. This in turn may lead to development of regional political systems. Here it is worth to point out that institutionalization of leadership is not only involved with warfare and increase of conflicts, leaders may also sometimes moderate the intensity of conflict, help solve

problems, and manage the risk in trade and technology. Leaders also may take other roles such as organizing the community, representing the community in intergroup interactions and ceremonies. They are usually spokespersons of their community and therefore they have higher status (Dubreuil 2010: 175). There is a great potential in the Local-Group level societies that favor the rise of ambitious individuals (variously called Big Men, Great Men, Head Men, aggrandizers, elites or chiefs) for power in order to expand their access to more power, prestige and properties (Johnson and Earle 2000: 133-136).

Rappaport (1968; 1979; 1999) and Bailey (2001a; 1960; 2001b) demonstrated that ritual knowledge, information, and proximity to the god and spiritual power, rituals, communal events, and ceremonies, prepare a very good ground for the emergence of social inequality. Barbara Bender (1989) also stresses on ideology as a source for social inequality that can be traced back to pre-farming communities in Paleolithic period. In the Local-Group level societies, leaders are more tied to ceremonies and performances in intergroup ceremonies. The more they are strong and honored, the more their communities enjoy higher status, are strong, and honored (Johnson and Earle 2000: 134-136). “The Big Man's decisions on behalf of his group inevitably entail a certain loss of family-level autonomy among his followers. True, the Big Man must please his followers or lose their support, but while in power he restricts their options by dominating systems of production and distribution" (Johnson and Earle 2000: 203-204).

To Johnson and Earle (2000: 251-252, 259), in the Regional Polities, which includes chiefdoms (simple and complex) and the state level societies, power originated from intensification or surplus-producing, the military, and ideology. Power also by

itself is the machine for creating inequality and social stratifications. Intensification in surplus-producing requires management and then it prepares a ground for the rise of differentiated power. The intensified economy leads also to competition for resources, which favors the rise of an armed force. In order to maintain unequal access to the power, ideology legitimizes the arrangements by the warrior elite, their control over production and military, and their position in the society. Ideology that is involved with public performance by itself is one of the sources of social inequality. In the Regional Polities we see the clear formation of social stratification that suggests that inequalities are structured and institutionalized (Johnson and Earle 2000: 251-252, 259).

It seems that breaking down of Fried's (1960; 1967) and Service's (1962; 1975) evolutionary typology of societies by Johnson and Earle provided more flexibility in conceptualizing of social evolution in relation to social inequality and stratification. As we see in almost all neo-evolutionary perspectives through mechanisms of institutionalization, social inequality is tied with different stages of social evolution. Not only in Fried's and Service's evolutionary models but also in other explanations such as conflict model (Carneiro 1970; 1978) and hydraulic model (Wittfogel 1957; 1974) social inequality is tied with evolution of societies specifically with the rise of chiefdoms and the state level complex societies and state formation (see also Feinman 1995).

Probably the first critiques of neo-evolutionary model could be seen in Flannery's work (1972) in that neo-evolutionary models do not consider the role of information in culture. For some scholars, institutionalization does not provide a clear explanation about how inequality leads to a complex society. Pointing out deficiencies of evolutionary models, Paynter (1989: 387) argues that "social differentiation precedes the

institutionalization of inequality, and hierarchies exist in egalitarian contexts. Ecological crises follow, rather than precede, the institutionalization of inequality. Finally, orders of inequality are notoriously unstable." Paynter (1989; 1991) proposed three more mechanism through which social inequality could have been led to more complex social organization. He suggests that mechanisms such as monopolization, totalities, and resistance also may contribute to the creation of stratified relations in the society.

Brian Hayden (1995) relies on both ethnographic and archeological data as he regards feasting as one of the major mechanisms of gaining power. Feasting could have occurred in a society that enjoys abundance, productivity and surplus. He argues that there was not "any community need behind the emergence of social inequality" and assumes that self-interest in humans is another important factor that leads him to become a competitive and social actor that strives to gain more wealth, power and ultimately dominance. In sum, he maintains that social inequality may arise and become institutionalized based on two principles: on the one hand the "resource reliability and abundance condition", on the other hand aggrandizers who are "individuals with competitive, acquisitive personalities who try to use whatever means a community provides to rise to the top of dominance hierarchies" (Hayden and Gargett 1990: 17; Hayden 1995: 22-23).

Under influence of studies in human evolutionary biology and studies of rank in non-human primates, new perspectives have emerged with regard to inequality, rank, and hierarchy in human societies. Now it is argued that the default human social organization is not egalitarianism. It is argued that social inequality should be decoupled from complexity (Ames 2010; Dubreuil 2010; Diehl 2000b).

Christopher Boehm (2000) argues that we need to explore the origin and the nature of egalitarian behavior rather than explaining the origin of complex societies. He states that we human beings descended from an inherently dominance-hierarchy-oriented animal. Based on his observations among nomadic-foraging and post-domestication small-scale societies, he indicates that they are "consciously concerned with suppressing domination behavior among males of the group and that when individual dispositions to domination were expressed inappropriately the offenders were being carefully put down by other group members" (Boehm 2000: 35). He proposes that hominids and humans have always been hierarchical. Scholars argue that we humans have a primate legacy that generally includes seeking prestige, engaging competition, and aggressive behavior.

Commenting on the neo-evolutionary perspective of Elman Service and Morton Fried, Dubreuil argues that there are societies, especially so-called big-man societies, in which considerable wealth accumulation does exist but without a rank system (Dubreuil 2010: 176). Robin Osborne also states that the development of hierarchy may not necessarily lead to unequal access to resources (Osborne 2007). Based on ethnographic studies Kenneth Ames also indicates that there are small scale societies demonstrating social inequality but lacking other aspects of social complexity (Ames 2010: 16).

Ames (2010: 37) argues that competition for prestige through "costly signaling" might be materialized or manifested in material forms such as male hunting. However, differential access to resources may not necessarily be manifested or embodied. This reminds me what Berreman (1981a) pointed out that inequality has multiple dimensions one of which is material dimension. Other dimensions such as behavioral, existential, and moral aspects are not easily detectable by archaeology. "Status is measured via

attention structures, thus hominin rank orders in the absence of symboling require some degree of regular face-to-face interaction to maintain." Ames further argues that appearance of prestige technologies in archaeological contexts could have been indicators of the evolution of symboling rather than prestige competition and rank order (Ames 2010: 37).

Despite all these different theoretical approaches, I think in practice Berreman's (1981a) conception of dimensions of social inequality is most useful for archeologists. Among his four dimensions, only the material dimension might be accessible for archaeologists through which they can examine social inequality, only if it is expressed in material form. Archaeologists have developed a set of proxy indicators through which they can make inferences about social status in archaeological contexts. There are a number of variables and forms through which social inequality might be expressed, and archaeologists can appeal to them to address questions regarding social status (see e.g. Seibert 2008; Wason 1994; Paynter 1989). Wason (1994) has listed many of them as following:

- Interments and burials
- Artifacts (elite goods, symbolic, sumptuary)
- Architectural variations and spatial relationships among buildings
- Iconography and Art
- Diet and nutritional status
- Workload experience
- Craft specialization
- Distribution of artifacts

- Food items
- Tools
- Protective devices
- Inference of wealth
- Non-residential construction or public architecture

Nevertheless, there are few considerations that in analysis of any form of social inequality we have to take them into out considerations:

1- Aforementioned proxy materials and variables may not be the only material forms that social inequality might be expressed through. Social inequality in different regions time periods in different cultures might be expressed differently.
2- Not all of these variables might be seen in every single archaeological context. Thus, I do not claim and do not expect that this study would analyze all of these variables because it is a matter of availability.
3- Analyzing of each of these variables entails different methodologies and techniques (sometimes interdisciplinary methods). Application of any methods or techniques depends on the materials discovered.

Archaeologists know that among social dynamics in the past, one of the generators of material culture could have been social inequality and its various forms and dimensions. However, making bridge between material culture and social dynamics in archaeology has been always challenging and tricky, specifically in the case of social inequality. Given the theoretical developments reviewed above, the interpretation of

material remains is difficult because the multi-dimensionality of social inequality demands caution in analyzing inequality especially inequality in the past through proxy materials.

By reviewing scholarship on social inequality in sociology, anthropology and archaeology, I demonstrated how each of these disciplines contributed to our current understanding of social inequality in human societies. Although now we are way beyond divine order and moral approaches to social inequality, reviewing notions of early social thinkers indicates that our understanding of social inequality is highly depended on how we approach it and what concerns us about inequality.

Sociological studies on social inequality in modern or industrial world, contributed to our understanding about the ways social inequality is expressed, what dimensions and forms it may take, how complex it is and with certain terminologies created a common ground in scholarship on social inequality. Sociologists provided great understanding of its complexities, dimensions, and dynamics. With a good grasp of its dynamics in current human societies, sociologists pinpointed the study of social inequality in broader human social structures. They provided us with a number of playing factors in dynamics of social inequality, its possible causes and most importantly its possible and wide range of consequences.

Anthropologists were also concerned with social inequality and their studies added more depth to our current understanding of this complex phenomenon. As sociologists focused more on the consequences and dynamics of social inequality, anthropologists including archaeologists mostly focused on its origins and diversities

across the world and through human history. By broad perspectives and comparative understanding, anthropological studies demonstrated that social inequality is a ubiquitous, antique, and pervasive phenomenon and can be different in terms complexities from time to time, regions to regions, and culture to culture. Anthropological studies pointed also to a wide range of possibilities and potential bases that could have given rise to social inequality and a hierarchical social order. Anthropology indicated that social inequality is not a recent phenomenon and was not necessarily intensified by industrialization and modernization.

Due to the nature of data, archaeologists focused on material expressions of social inequality. Archaeological studies demonstrated that social inequality was and is not necessarily expressed in materials. Finding direct material evidence of social inequality particularly in prehistoric settlements is much more complicated than it was assumed. Archaeologists usually utilize a set of proxy materials to analyze social inequality, however, they are aware that all data are subject to interpretation and strongly affected by our methodologies and approaches.

Archaeologists have to involve with two major issues; firstly, the fact that social inequality is a multi-dimensional phenomenon, its material expression is only one of its dimension, and it may not necessarily be expressed in materials. Secondly, even if it was expressed in material, we may not necessarily be able to detect it in archaeological contexts since materials are all subject to preservation. Hence, archaeologists may be lucky to discover any material expression of social inequality.

In studies of Köhne Shahar, I will attempt to detect possible material expressions of social inequality. I will try to see if social inequality in any forms or dimension could

have been manifested at Köhne Shahar. Contributions of sociologists and anthropologists may help me better understand the possible ways that social inequality could have been manifested at Köhne Shahar. New perspectives in studying power as a major producer of social inequality and power relations (see Giddens 1973; 1984: 1-40; 1993: 131-132; 1981), gradational micro social processes leading to creation of inequality (see Bourdieu 1985; 1987; Bottero 2005b; a; Devine 1998), the wider range of bases and mechanisms that could have given rise to a leadership positions, and wider range of ways that social inequality could be maintained and perpetuated (Vaughn, et al. 2009; Kienlin and Zimmermann 2012; Dubreuil 2010; Diehl 2000a) enable me to apply a comprehensive approach to study social inequality at Köhne Shahar.

Having better understanding of its intricacies, various bases, forms and dimension, possibilities of its dynamics, and its wide range of consequences or results may help me to apply appropriate methodologies, careful strategies in explorations, and greater awareness and better understanding in interpretation of data collected from archaeological contexts at Köhne Shahar. In this study I will try to apply a comprehensive approach to analyze all aspects of social inequality that could have material manifestations, including evidence, indicators, and potentialities and possible bases. In addition, based on evidence I will attempt to address not only possible causes and origins of social inequality at Köhne Shahar, but possibly also its consequences, results, and dynamics.

Chapter 3. History of Scholarship on the Kura-Araxes

Our knowledge about KACC is limited and a clear picture is yet to be drawn, and probably for these reasons, it fascinates archaeologists in many aspects. Scholarship on KACC is dominated by studies of its ceramics, regional interactions, and distribution of its material culture. Even its chronology is based on typological rather than stratigraphical evidence, a situation that has caused contradictory arguments and disagreements (Kiguradze and Sagona 2003: 39; Palumbi 2008b: 1).

There are few synthetic works on KACC that could draw a general picture of the phenomenon, although there have been some attempts (Kushnareva and Chubinishvili 1970; i. e. Kohl 2009b; Kushnareva 1997; Sagona 1984; Munchaev 1975; see i.e. Kiguradze and Sagona 2003). Instead of a detailed review of all literature on topics such as ceramic typology, chronology, periodization, migration and its material distribution, in this chapter I will instead briefly go over the history of scholarship on KACC, with a particular emphasis on the studies of its social dynamics, specifically social inequality.

What are now known to be diagnostic ceramics of KACC were first discovered at Zaglik in Ganja district of Republic of Azerbaijan in the southern Caucasus 1869 (Munchaev 1994: 8); however, it was not until the 1930s that Boris A. Kuftin studied intensively this distinctive type of ceramics that were kept in the museum of Tbilisi (Kuftin 1944). Slightly earlier, similar ceramics were discovered in Jordan Valley surveys by W. Albright (Albright 1924-1925). Kuftin thought that these handmade, black or dark grey burnished ceramics were mostly distributed in sites between Kura and

Araxes Rivers basins so that in 1940 he coined the term "Kura-Araxes Culture" to distinguish them from other ceramics in the region (Munchaev 1994; 1975; Kushnareva 1997: 43-44; Kiguradze and Sagona 2003; Kohl 2009b; Areshian 2005: 71). As time went on, similar materials were discovered by western and local archaeologist throughout the Near East.

Scholars have documented this material as far south in northwestern Iran (Burney 1961; 1962; 1964; 1972; 1975; 1976), the central Zagros, at least as far as Kangavar valley near Kermanshah (Young and Levine 1974; Young 1969; 2004), on Qazvin and Tehran plains in northern areas of the central plateau (Fazeli and Ajerloo 2004; Fazeli and Abbasnezhad Sereshti 2005; Piller 2012), and along the Caspian Shore in northern Iran (Fahimi 2005). The Kura-Araxes cultural communities also spread to eastern Anatolia and further west into the Levant (Fig. 1) (Amiran 1965; Batiuk 2005; 2013; Batiuk and Rothman 2007; Burney 1958; Greenberg 2007; Greenberg, et al. 2006; Greenberg and Paz 2005; Miroschedji 2000; Philip and Millard 2000; Rothman and Kozbe 1997; Summers 1982; 2004; 2013) and perhaps to Cyprus (Frankel 2000; Frankel and Webb 2000; Webb and Frankel 1999).

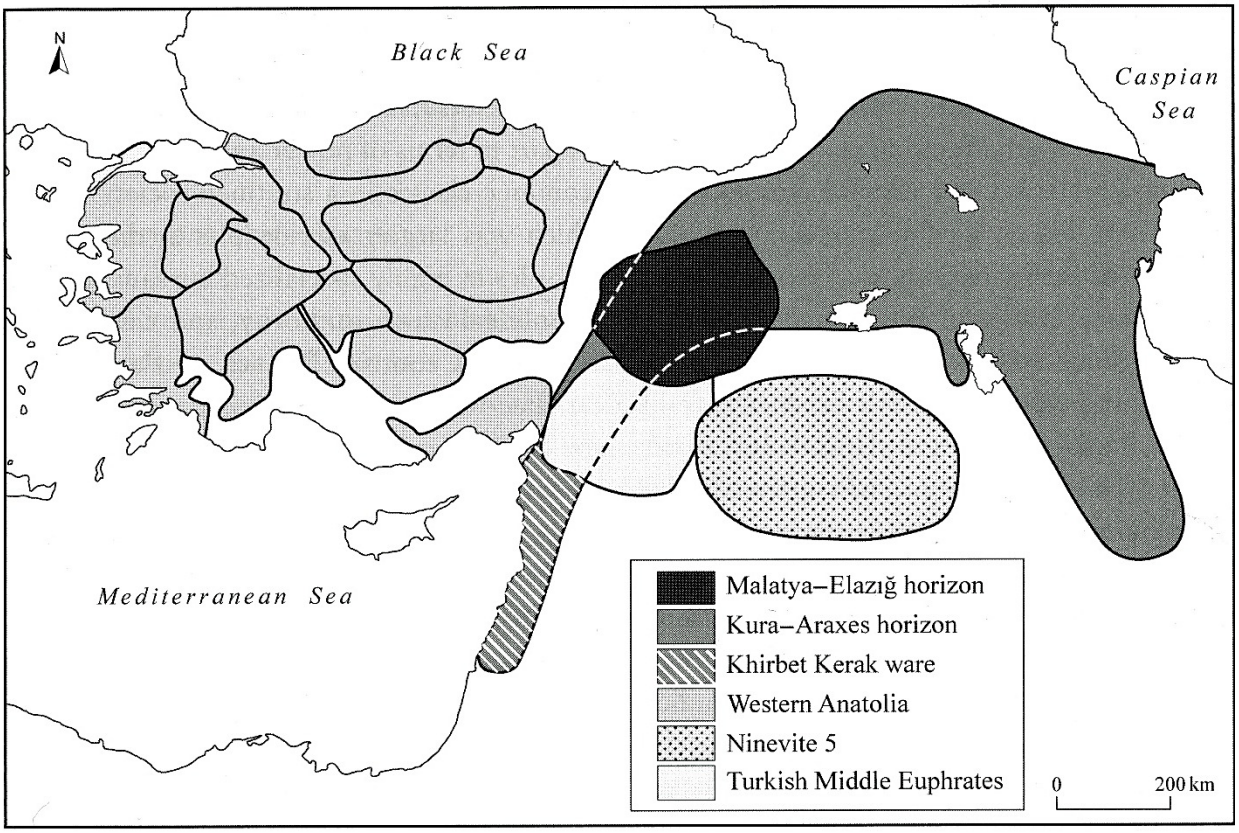

Fig. 1. Distribution of Kura-Araxes material culture in the Near East
(after Sagona and Zimansky 2008)

This unprecedented distribution of an archaeological tradition throughout much of southwest Asia (see Rubinson and Smith 2003; Palumbi 2003; Gopnik and Rothman 2011; Rothman 2005b; 2003a; b) raises important questions regarding the dispersal mechanisms of the material culture of KACC (Batiuk 2013; Rothman 2005b; 2003a; Sagona 1984; Palumbi 2003; 2008b; Frangipane and Palumbi 2007), as well as the socioeconomic dynamics and modes of political organization of these communities.

Although there is a homogeneity in Kura-Araxes material culture across different regions of the Near East, significant regional variation has led archaeologists to use different names to describe it, variously “the Shengavit Culture”, “Kura-Araxes Culture”, “the Early Transcaucasian Culture” (Burney and Lang 1971), “the Outer Fertile Crescent

Culture" (Kelly-Buccellati 1979), "Karaz" (Burney and Lang 1971: 44), "Yanik" (Dyson 1973: 686-687), "Red-Black Burnished Ware Culture" (Braidwood and Braidwood 1960), "Culture of Northeast Anatolia" (Lamb 1954), and "Khirbet-Kerak Culture" (Amiran 1965). Even more names have been recently proposed and used by scholars such as "Kura-Araxes Cultural-Historical Community" (Kohl 2007: 88; 2009b) and "Dagestan-Palestinian Archaeocultural Area (or DPAA)" (2007: 28; 2005: 72).

Studies indicate that by the end of the fourth and early third millennium BC a unique material culture, the so-called Kura-Araxes Culture or Early Transcaucasian Culture, spread from the southern Caucasus throughout northwestern and western Iran, eastern Anatolia, northern Syria and the Levant. KACC represents one of the most geographically dispersed archaeological horizons in the pre-Achaemenid period in southwest Asia. Despite this regional variation, unmistakably similar modes of architecture, ceramics, and artifact types are recurrent over a wide geographical zone from southern Caucasus to the Levant and the Central Zagros (Kiguradze and Sagona 2003: 38; Sagona and Zimansky 2009; Rubinson and Smith 2003: 2; Kushnareva 1997; Palumbi 2008b; Lyonnet 2007).

Several characteristics can be recognized in all regions. These characteristics are best summarized by Kiguradze and Sagona (2003: 38) as followings;

> "rectilinear, subrectangular, and circular houses built of mudbrick or wattle and daub; portable and fixed hearths that are often anthropomorphic or zoomorphic in style; a wide range of hand-built burnished pottery often displaying a contrasting color scheme of black, grey, brown, and red, and sometimes bearing elaborate ornamentation; well-crafted bone implements; standardized horned

> animal figurines; a simple range of metal objects most of which may be classed as arsenical bronzes; and a standardized stone tool repertoire that is manufactured primarily from obsidian in the eastern areas" (see also Sagona 1998).

Tremendous effort has been devoted to the establishment of the chronology and periodization of KACC (it is briefly summerized by Palumbi 2008b). During last few decades probably nothing about KACC has been debated more than its chronology and periodization.[4] There are few absolute dates, different terminologies are used by archaeologists (sometimes for the same phenomena), different approaches and research methodologies are employed, and the quality of research on KACC has been uneven. These circumstances have caused difficulties in establishing a chronology for KACC. As

[4] Also considerable effort has been devoted to questions such as its origin and interactions with other regions and cultures, see Amiran 1965; Chubinishvili 1966; Kiguradze and Sagona 2003; Palumbi 2003, 2008; Paz 2009; Rothman 2003a, 2003b; Sagona 1984; Todd 1973

is typical among archaeologists, a threefold division for its internal periodization is most often used, namely Kura-Araxes I, II, and III (see Table 1 below).[5]

BC	Southern Caucasus						Upper Euphrates				E. Anatolia
	Djaparidze 1961	Kushanreva Chubinishvili 1970	Burney Lang 1971	Kavtaradze 1983	Sagona 1984	Kushnareva 1994	Santa Fe 2001	Mellink 1992	Conti Persiani 1993	Marro 1997 2000	Sagona Sagona 2000
3600				KA I	KA I	EB I	LC 3	LC			
3400							LC 4				LC
3200				KA II		EB II	LC 5	EB I			
3000	KA I	EB I	ETC I		KA II				EB I	EB I	EB I
2800	KA II			KA III		EB III		EB II	EB II	EB II	EB II
2600	KA III	EB II	ETC II			EB IV					
2400									EB III	EB III	EB III
2200		EB III	ETC III		KA II			EB III		EB IV	MB I
2000					KA III						
1800											

Table 1. Synoptic table of the chronologies and periodizations proposed for the Fourth and Third millennium in the area under study (Palumbi 2008b: 19).

Here I will review only those chronologies that have been widely employed by archaeologists. Kushnareva and Chubinishvili (1970: 61-62) and Munchaev (1975: 192-196; 1994: 18) proposed an internal periodization of Early Bronze Age (3000 – 2700/2600 BC), EBA II (2700/2600 – 2400/2300 BC), EBA III (2400/2300 - 2000 BC),

[5] Of course not all archaeologists have followed this threefold division. For example Kushnareva (1997: 53-54) favored a fourfold division. She considered KACC to be an Early Bronze Age culture and has proposed EBA I (3500-3200 BC), EBA II (3200-2900 BC), EBA III (2900-2600 BC), and EBA IV (2600-2300 BC) (see also Palumbi 2008b: 327 and Tab. 1). Even Abbas Seyidov (1993; 2000: 30, 93) uses a different fourfold division for chronology of KACC. Based on Kura-Araxes settlements in the Nakhichevan area in southern Caucasus, He proposes Phase 1 or Formation Phase (4100-4000 BC with sites for example Ovchular Tepesi, Khalaj, Damlama, and Sederek in Nakhichevan), Phase 2 or Initial Phase (3600-3150 BC), Phase 3 (3150-2700 BC), and Phase 4 (2700-2400 BC).

and published a list of settlements and their internal phases placed into periodization. Since it was proposed by Kushnareva and Chubinishvili, this chronology has been used by many archaeologists.

Subsequently, Kavtaradze (1983: 38, Tab.2 and 82-128; also in 1999: 69, Fig.2) proposed a new and "high" chronology which is independent of the Early Bronze Age periodizations. He argued that the KACC in Georgia began sometime during late Eneolithic period. Thus he proposed KA I (3800-3700-3500/3400 BC), KA II (3500/3400-2800/2700 BC), and KA III (2800/2700-2500/2400 BC).

The other significant chronology is based on site-specific stratigraphy at Sos Höyük in the northeast of Anatolia. Sos Höyük is particularly significant because it shows a close connection with the Southern Caucasian sites, and it provides a good sequence of Kura-Araxes material culture from earliest phase to the latest. At Sos Höyük KACC is attested in Late Chalcolithic phase (Sos VA 3500-3000 BC) and then EBA I (3000-2800 BC), EBA II (2800-2500 BC), and EBA III (2500-2200 BC) (Sagona 2000a: 332-336). Although there is no full agreement on dates (absolute and relative) proposed for KACC yet, our understanding of chronological range of the Kura-Araxes is much better than before because of the Sos Höyük data.[6]

Archaeologists have speculated that the Kura-Araxes communities practiced simultaneously both sedentary agriculture and transhumant pastoralism. However, the degree of each of these subsistence strategies from area to area may have been different.

[6] Radiocarbon dates from newly excavated sites of Ovçular Tepesi in Nakhchivan, Azerbaijan (see Marro et al. 2009, 2011, and 2014) and Areni-1 in Armenia (Areshian et al. 2012 and Wilkinson et al. 2012) unexpectedly pushes the chronology of the genesis of the KACC in Caucasus to the late-5th millennium BC. Radiocarbon dates suggest 4000 BC for Areni-1 and 4300-4100 BC for Ovçular Tepesi.

Communities in the highlands were more involved with pastoralism. In the lowlands and steppes, where people were mostly sedentary, the main subsistence strategy was agriculture, and to a lesser degree pastoralism. Kura-Araxes settlements vary from tiny hamlets to urban or semi-urban settlements (Kiguradze and Sagona 2003; 2009b; 2007; Kushnareva 1997; 1998; Chernykh 1992; Chubinishvili 1966; Sagona 1984). "The spatial organization of many Early Transcaucasian Culture [KACC] settlements is camp-like in the consistent orientation of dwellings, although their high density suggests otherwise" (Cribb 1991: 221).

The extensive surveys of the German team in Chaldran, Khoy, and Maku areas show that while there are numerous Neolithic and Chalcolithic settlements around Urmia Lake to the south, they are rare to the north in mountainous areas (Kroll 2004b: 45; 2005). This means that probably the region was sparsely populated in time of the first occupation at Köhne Shahar. Some of the KACC settlements were fortified. There are several Kura-Araxes settlements situated on natural terraces and secluded flat-topped hills that some of them are fortified, such as Karmrakar and Lusaghbyur, and Tsaghkasar in Armenia (Badalyan and Avetisyan 2007) and Köhne Shahar and Yakhvali in Iranian Azerbaijan (Kleiss and Kroll 1979). However, Köhne Shahar is the largest of the Kura-Araxes settlements (Kroll 2004b: 46; 2005: 117). Kroll (2004b: 46; 2005: 117) considers Köhne Shahar a city with an urban structure, unique within the whole KACC.

Given the fact that southern Caucasus is seen as the homeland of KACC, and it is considered intrusive into archaeological sequences of the other regions in the Near East, it is not surprising that KACC has been studied in southern Caucasus more than in any other region, and more Kura-Araxes settlements have been excavated there. The

application of a Marxist approach during 1930s to 1990s, when most of the southern Caucasus was part of the Soviet Union, had positive consequences. What is known about subsistence strategies and spatial organization is mostly indebted to Marxist archaeology in the Soviet Union. In order to explain changes in the past societies, Bruce Trigger (2006: 334-335) argues that Marxist archaeology mainly focused on social structure or organization rather than technology (see i.e. Kushnareva 1997: 219-233).

They not only attempted to describe their findings but also to reconstruct the societies that generated them. Their research included speculation about the mode of production of those societies, their technology, and social organization. This approach in turn inspired Soviet archaeologists to conduct large-scale horizontal excavations of settlements (Chubinishvili 1966: 168).

Large-scale horizontal excavations at sites such as Kvatskhelebi, Khiznaant Gora, Guda-bertqua, Tetritskaro, Amiranis Gora, Kiketi in Georgia, Shengavit, Elar, Garni, Gevan, Kirovakan in Armenia, and Kultepe, Minghechaur, Baba-dervish in Azerbaijan and recently at Norabats in Armenia (Areshian 2007: 31) should be placed in this academic context. Despite these large scale excavations at sites such as Shengavit with a dense occupation, no hierarchy could be identified between houses and compounds (Wilkinson 2014a: 218).

It is possible to identify two contrasting approaches to Kura-Araxes communities. The first emphasizes on pastoral nomadic nature of the society and the other highlights its sedentary/agriculturalist aspects (see i.e. Shimelmitz 2003). On the one hand, an absence of features such as cities and settlement hierarchy, monumental construction of public buildings, evidence of symbolic behavior, and social stratification suggests that Kura-

Araxes society was characterized by moderate social complexity. On the other hand, communal construction and production sometimes reflect the amount of the power exercised by leaders of the community (Haas 1982: 185; Chapman 2003: 35-36). Small irrigation systems with dykes and canals have been recovered in plains and steppes; for example in the Ararat plain dykes have been recorded in association with archaeological sites such as Mokhra-Blur (Kushnareva 1997: 183). Most Kura-Araxes settlements are spatially small and rarely contain evidence for internal social differentiation. Settlement hierarchy is hardly seen and only labor mobilization could be done for fortifications, dykes and canal systems (Kohl 2009b: 250; Young 2004: 654).

The pastoral aspect of KACC, in combination with its unclear internal social differentiation, has led many scholars to see the Kura-Araxes society as egalitarian or non-complex (Kohl 1992b; a; 2007; 2009b: 250-251; Sagona 1993; Palumbi 2008b: 324-325). There was a prevailing assumption in the past according to which pastoralist societies were generally economically egalitarian (Asad 1979; Goldschmidt 1971; Mulder, et al. 2010; Parkinson 2002; Porter 2012; Salzman 1979).

Yet, studies of wealth accumulations and transmission among pastoralist communities suggest various sources of inequality (see Mulder, et al. 2010) that should be taken into account. These new approaches in studying social differentiations, hierarchy, and inequality may lead to better analysis of the degree of complexity within the Kura-Araxes communities in the future. We know very little, for example, about rituals (Sagona 1998; Kushnareva and Chubinishvili 1970: 161-168) or the degree of

specialized production of certain types of ceramics, metal objects, or controlled agricultural and herding activities within the society.

In comparison to well-known contemporaneous cultures in southwest Asia, the Kura-Araxes world lacked clear hierarchy in settlement patterns and any evidence for social stratification or ranked social order. Although there is good evidence for agricultural terraces, fortification walls, and small scale irrigation systems, there is no clear evidence for considerable accumulations of wealth or evidence for stratified socio-political order. For example, the seventeen fully excavated houses at Kvatskhelebi in Georgia showed little sign social differentiation (Kohl 1992b; Sagona 1998; 2009b: 250-251; Kushnareva 1997: 227).

Because of such low differentiation in Kura-Araxes material culture, questions of social inequality and hierarchy have not been addressed directly by archaeologists. However, the excavation of tombs and large horizontal excavations on Kura-Araxes settlements would have great potential for examining these fundamental issues. According to all data at our disposal from cemeteries, almost none are comparable to the accumulated wealth in Maikop burials and kurgans in the northern regions of the Caucasus (Kohl 2007: 91; Chernykh 1992: 59; see also Sagona 2004; Poulmarc'h, et al. 2014), with the exception of single rich burial at Arslantepe (see Frangipane 2000; Frangipane, et al. 2001). Of course, we should take into account that not many Kura-Araxes cemeteries have been excavated in comparison to settlements.

The general picture of KACC is a monolithic, agro-pastoral society with low socio-economic differentiation that does not fit well with Neo-evolutionary models. In the southern Caucasus, the emergence of accumulation of wealth, social hierarchy,

inequality, and clear internal socio-economic differentiation only occurred at the end of the third millennium BC with the appearance of the early Kurgans. It is argued that accumulation of wealth, sophistication in craft especially in metalwork, and manifestation of social inequality in material appears from the mid-3rd millennium BC onward in kurgan period and of course these kurgans are not considered Kura-Araxes (Sagona 2004: 488, 494).

Indeed, it is often argued that the growth of social complexity can only be attested in Late Bronze/Early Iron Age, specifically with the emergence of Urartian Kingdom (Palumbi 2008b: 324-325; Kohl 1992b: 134-135; Smith, et al. 2004; Smith 2005: 264; Badalyan, et al. 2008: 46; Badalyan, et al. 2003; 2007: 257).

In general, the history of scholarship on KACC is dominated by issues such as its origins, geographic distribution of its material culture, immigration and ethnicity, internal periodization, ceramic typology, and to a lesser extent about subsistence strategies and economic interactions. Since appearance of the Kura-Araxes material culture is generally considered intrusive to the local sequences (see Abay 2005; Kohl 2009b), many scholars are attracted to the migration hypothesis. More than any other aspect of KACC, the distribution of its material culture over a vast region in the Near East has fascinated scholars and led many of them (i.e. Braidwood and Braidwood 1960; Todd 1973) to use migration as an explanatory mechanism (see i.e. 2009b; Rothman and Kozbe 1997; 2003a; b; 2005b; Batiuk and Rothman 2007; Schwartz, et al. 2009; Kohl 2001; Paz 2009; Abay 2005; Greenberg 2007; Greenberg, et al. 2014).

The migration hypothesis has also inspired a great number of studies on various aspects of Kura-Araxes ceramics such as techniques, characteristics and traits, material

and petrographic analysis, regional styles, etc. in addition to ceramic studies in its own right (see Palumbi 2008b; 2003; 2008a; Iserlis 2009; Greenberg 2007; Rothman 2003b; Amiran 1965; Mason and Cooper 1999; Miroschedji 2000; Schwartz, et al. 2009; Heinsch and Vandiver 2006; Zuckerman, et al. 2009). The domination of these topics and issues in the scholarship on KACC, and our inability to make inferences about its social dynamics, suggest that we need to rethink about our approaches.

There have been some attempts to approach KACC social dynamics (Sagona 1998; 2004) and even an attempt to place it in one of the categories of the Neo-evolutionary model (Kohl 1992a). However, for some reasons it does seem that these attempts have failed to shed light on social life and dynamics of the "Kura-Araxes." First of all, KACC was a prehistoric society that left no textual record; archaeologists can only get information through material culture. Moreover and unlike other contemporary societies in the Near East, they have not left abundant evidence suitable for inferences about their social order, rituals and belief system, identity and ideology, possible social hierarchy, politics, organizational aspects or architecture of their society. Yet another factor, although tied to the previous one, might be that KACC has not been addressed much from an anthropological standpoint. Nevertheless, there are some hints about social structure, inequality, and hierarchy within previous literature.

Kushnareva (1997: 225-229) has considered this issue and argues for some potential sources for social inequality among Kura-Araxes. She speculates that construction of irrigation canals, agricultural terraces, dams, and fortification walls (see i.e. Badalyan and Avetisyan 2007) meant that men had more social roles than women. On the basis of some artifacts associated with the construction of fortification walls found

in men's graves at Kvatskhela, Amiranis-gora, and Karaz, she further argues that men's socio-economic role in society had expanded and caused the growth of conflict and militarism. In comparison with the Neolithic and early Chalcolithic periods, there is a considerable increase in number of male statuettes in the late Chalcolithic and Early Bronze Age. Based on multi-room houses and the relative richness of men's graves, she argues that families were extended and patriarchal. Her speculations are supported, for example, at Arich by male statuettes, hearthstone supports with phallic representations, and stones in the form of phalli. For Kushnareva, these developments were inevitable because of the accumulation of surplus.

Gregory Areshian also has attempted to approach the degree of social complexity in KACC. At Norabats, an EBA settlement in Armenia, a cluster of several small satellite houses around the "core" houses which are larger than other satellites has led him (Areshian 2007: 31-32; 2005: 75, 79) to suggest that the satellite houses represent multi-generational families, whereas the core houses served as residences for the heads of the families. In addition, he argues that other elements of the core house made them functionally different from the satellites, including central "cultic hearths", ovens, and a large "cultic clay figurine" depicting an equidae and also grindstones, a stone anvil, and fragments of storage jars out. For Areshian, these complexes of core/satellite houses represent hierarchical social differentiation (Areshian 2007: 31-32; 2005: 75, 79).

In addition, Areshian (2007: 37) uses fortification walls and irrigation canals as more evidence for increasing of social complexity in Kura-Araxes communities. He argues that the construction and maintenance of fortifications and canals required communal organization, centralized management, and the institutional organization of

community life. Such constructions indicate the existence of higher-level authorities such as councils of elders, chiefs, or priests, which suggests unequal access to organizational and managerial power. Fortification walls, he argues, may suggest the emergence and existence of military leadership as well, and he uses the "royal tomb" at Arslantepe as an example of military leadership.

Walls have been documented at many Kura-Araxes sites such Yanik Tepe in NW Iran (Summers 2004: 623; 2013: 60-70), Tel Bet Yerah in Levant (Greenberg and Paz 2005; Greenberg, et al. 2006), Shengavit, Adablur, and Mokhrablur in the Armenia (Areshian 2005, Fig.14, Fig.21: C; 2007: 45-46). However, in many cases, either the state of their contemporaneity with respective Kura-Araxes deposits is unclear, or their functional nature is not well understood.[7] In general, materials representing militarism and warfare are rare in Kura-Araxes sites. This led some scholars to assume that in KACC people experienced a relatively nonviolent period compared to later periods, especially the Late Bronze and Early Iron Ages (Kushnareva 1997: 74-75; Kohl 2007: 90).

Another element that might suggest the existence of hierarchy among Kura-Araxes is settlement size. Some scholars suggest that generally there is a tripartite settlement hierarchy among Kura-Araxes settlements. Small sites were around 0.5-1 to 1.5-2 hectares; medium-sized sites were between 1.5-2 to 5-6 hectares; and large sites were more than 6-8 hectare (Areshian 2007: 39-41; Kushnareva 1997: 74, 78, 225;

[7] i.e. Sos Höyük in north-easter Turkey (see Sagona 2000; Sagona, et al. 1997; Sagona, et al. 1998; Sagona and Sagona 2000) and some other examples such as Shengavit and Mokhrablur in Armenia (see Areshian 2005; Kushnareva 1997: 74-75). Although the wall at Sos Höyük is clearly associated with the Kura-Araxes settlement, however, probably it is not a defensive in nature. Here I would like to thank Antonio Sagona who generously shared his insight on the wall at Sos Höyük through email exchanges.

Young 2004: 653-656; Munchaev 1994: 31; Badalyan and Avetisyan 2007: 303). Some the Kura-Araxes sites were probably ephemeral (Sagona 2004: 487-488). Areshian (2007: 42) considers the settlement hierarchy in Kura-Araxes settlement patterns an indicator of the existence of political organization or sort of economic control. However, contrary to his earlier thought, Kohl (2009b: 250; 2007: 90, 257) sees no sharp breaks in this three-tiered settlement hierarchy.

Despite the speculations of Kushnareva (1997: 225-229) and Areshian (2007) on existence of Kura-Araxes social differentiation, the only clear and explicit evidence comes from the so-called "royal tomb" at Arslantepe. Aside from this single rich burial, no Kura-Araxes cemeteries are comparable to accumulated wealth in the contemporary Maikop burials and kurgans in the northern regions of Caucasus (Kohl 2007: 91; 2009a; Munchaev 1994: 34-36; Chernykh 1992: 73). There is no rich burial in the Kura-Araxes cemeteries or graves comparable to those of Maikop burials and Mesopotamians tombs (Chernykh 1992: 59).

The discovery of the wealthy Kura-Araxes tomb at Arslantepe in southeastern Anatolia may shed light on the state of social stratification or hierarchy within Kura-Araxes communities. It was found in an isolated position on the western slopes of the site and because of its richness in term of burial goods, it has been called the "royal tomb". The tomb (S150) consists of an upper level and a lower level (cist tomb T1). It is ascribed to a high-status person. Based on many lines of evidence, materials from this grave are most likely associated with Kura-Araxes cultural materials or maybe it belongs to a Kura-Araxes "warlord". Features of the tomb such as human sacrifice in the upper level, ritual features, extraordinary richness of the furnishing, and grave goods, make this

tomb as "an elite tomb, perhaps for a royal personage or at all events a member of ruling class" (Frangipane, et al. 2001: 135; Frangipane 2000; Palumbi 2008b).[8]

Although materials in the "royal tomb" at Arslantepe in Malatya of southern Anatolia represents both local and KACC, it is not comparable to any of Kura-Araxes burials in the "homeland" of KACC (the southern Caucasus, eastern Anatolia and northwestern Iran). The grave consists of an adult male inside the tomb (cist tomb T1) with an extraordinary rich set of grave goods. The burial assemblage includes objects made of ceramic, stone, textile, and particularly metal. The 64 metal items were variously made of copper, arsenical copper, pure silver, an unusual copper silver alloy, and gold. Above all, the evidence suggests that two pairs of young individuals were "sacrificed" (Frangipane, et al. 2001: 108-113; Palumbi 2008b: 107-156). These extraordinary grave goods clearly show the accumulation of wealth and differentiated social status. The buried male at the center of this collective tomb must have had very high social and political status in his community (Kohl unpublished; Palumbi 2008b: 148).

The tomb is exceptional both at Arslantepe and in the whole KACC, in terms of its extraordinary richness, furnishings, and human sacrifices. Although there are some Uruk style ceramics in the tomb as well, it is considered the only clear representation of hierarchal structure and inequality in "pastoralist" Kura-Araxes communities

[8] There are some other notions about Arslantepe warlord. For instance Adam Smith does not agree on that Arslantepe entombed figure was a Kura-Araxes warlord. In our personal email exchanges Adam Smith argues that "we have no current evidence of military violence associated with the KA [Kura-Araxes]. It is hard to be a warlord absent near constant martial violence. Keeping the totality of the assemblage in mind, it strikes me as more likely someone from the North Caucasus (ie. Maikop) who penetrated south on an extended expedition (raiding perhaps), hence the scope of the assembled materials." I am grateful to Adam Smith for sharing his insights with me on Arslantepe warlord.

(Frangipane, et al. 2001; Frangipane 2014: 181). The date of the tomb, 3000-2900 BC (Frangipane 2000: 451), fits with the second phase of Kura-Araxes (KA II) which represents the peak time that KACC expanded over the vast region in the Near East. The Kura-Araxes materials at Arslantepe are intrusive and it does not have any place in the archaeological sequence of the site. This tomb attracted attention in two ways. It shows the south Caucasian interaction with the rest of the ancient Near East, especially with the Late Uruk communities in northern Mesopotamia, and most importantly, it shows for the first time clear evidence of status differentiation in Kura-Araxes material culture.

Nevertheless, by the mid-3rd millennium BC indicators of social complexity within KACC and interactions with complex societies in the Near East increased. Co-occurrence of Uruk materials or local materials with Kura-Araxes materials in sites such as Arslantepe (Frangipane, et al. 2001) and Tell Mozan (Kelly-Buccellati 1990) suggests inter-regional interaction of KACC of eastern Anatolia and Caucasus with the more complex societies of upper Euphrates. However, the KACC are considered as one of the "peripheral" and passive in a broadly World-Systems approach (see Algaze 1989; 1993) that ultimately became competitor with the "core".

An increase of the indicators of complexity in the Kura-Araxes settlements during the 3rd millennium BC have led some scholars to speculate about possible stimulations by their contacts with early complex societies of the Upper Euphrates (i.e. see Kelly-Buccellati 1990). Algaze (2001b: 76) sets forth a scenario in which

> "the complex settled northern polities that initially benefited from inclusion in the wider exchange network opened by the Uruk outposts would have eventually come to contest the presence of the outposts in their midst at the

> same time that, unwittingly, they were themselves becoming targets for previously less-sophisticated local competitors that were also becoming increasingly complex and expansive as the impact of the highland exchange with the Uruk world trickled out to the farther reaches of the system of interaction."

Some scholars even suggest that Kura-Araxes communities may have contributed to the collapse or abandonment of Uruk colonies and enclaves in highland areas, which in turn, led to the collapse of the whole Uruk system (Algaze 2001b: 76; Kohl 2007: 97-98; Lamberg-Karlovsky 2008: 10), and they probably pushed Proto-Elamites to further east (Alizadeh 2014a: 38). Despite acknowledging the increase of the indicators of complexity in KACC, the issue itself has not yet been addressed or analyzed intensely.

Although there are some hints of inter-regional interactions of KACC, especially with societies of the upper Euphrates, evidence of trade and exchange in Kura-Araxes world is surprisingly ambiguous. Unlike other complex societies of the Near East and Central Asia, we know very little about Kura-Araxes exchange network. What we know is mostly about appearance of their typical ceramics in various areas of the Near East. Again in this sense 'royal tomb' at Arslantepe is an exceptional. Kura-Araxes burials do not provide large quantities of objects making it difficult to analyze their possible exchanges and the flow of materials in an out of Kura-Araxes world (Wilkinson 2014b: 291). This is very important given that fact that from the mid-3rd millennium BC the entire Near East and Central Asia are characterized by intensified long-distance trade, material flows, and expansions (see Wilkinson 2014b: 295-298).

Except Kura-Araxes settlements near the salt deposits of Duzdağı (Marro, et al. 2010) which indicates possible mining and extraction of resources, none of the Kura-Araxes

settlements shows evidence of production, mining, or resource extraction. Comparison between the distribution of Kura-Araxes settlement and major copper sources indicates that most of the Kura-Araxes settlements were not in close proximity of the copper sources. Considering this settlement pattern, Tony C. Wilkinson (2014b: 311) argues that since Kura-Araxes settlements appear at "junctures between the sources and routes toward probable major markets … then that Kura-Arax communities were expert 'middle-men' with detailed knowledge of metallurgy, perhaps built into oral lore that simultaneously enforced a strong distinctive identity, particularly rituals of craft manufacture and food traditions."

Our information on craft production and manufacturing activities of the KACC is also very limited. Despite the scarcity of data on craft production, some scholars argue that metalworking was a driving factor of the KACC (see Chernykh 1992; Kohl 2009b: 254). However, new evidence of metalworking from Neolithic and Chalcolithic periods from Mentesh Tepe (see Lyonnet, et al. 2008; Lyonnet and Guliyev 2010) in Azerbaijan indicates that the KACC probably adopted metalworking from their antecedents in the region (Sagona 2014b: 25-26). Although there are some limited evidence of manufacturing activities and storage at Tepecik (see Esin 1979; 1982) in eastern Anatolia, what we know about the KACC craft production is mostly based on some isolated metal objects or from settlement especially metal objects and sometimes from graves such as Velikent and Arslantepe (see i.e. Gadzhiev, et al. 2000; Kohl and Magomedov 2014; Frangipane, et al. 2001; Sagona 2004: 489). Up until now no major manufacturing area or workshop units suggesting possible specialized craft production have been discovered at Kura-Araxes settlements (see also Summers 2014: 165).

In Caucasus there are some evidence of craft production and manufacturing activities but earlier in the first half of the 4th millennium BC at Leilatepe (Akhundov 2007; Narimanov, et al.

2007) in Azerbaijan. Despite some evidence of metalwork, there is no evidence of craft production in specialized level or considerably large scale at any of the Kura-Araxes settlements. However, Giulio Palumbi (2008b: 321) hypothesizes that by the onset of the 3rd millennium BC probably interactions with Upper Euphrates and eastern Anatolia could have intrigued specialized production and led to involvement of elites within the KACC. Overall, despite the geographical proximity of the KACC to the dynamic and complex societies of the Near East, specialize craft production is not documented in the KACC and manufacturing activities do not go beyond household levels. We do not see the same evidence of intensified long-distance trade documented in many sites of the Near East and Central Asia. No evidence of lapis lazuli, turquoise, carnelian stones or similar exotic materials are attested in Kura-Araxes sites (Wilkinson 2014a: 216).

As we can see from this review, few scholars have addressed the subject matter of social inequality in KACC, either directly or indirectly. This does not mean that the subject is not important or interesting for archaeologists. We can speculate about the reasons why the topic has not been addressed much during several decades of scholarship on KACC. At least we can easily expect that archaeologists with Marxist perspectives should have addressed and been interested in the topic. The first and the main reason is that compared to contemporary complex societies, KACC does not reveal any clear material expressions of socio-economic differentiations that could have let scholars make inferences about social inequality. Moreover, within the Kura-Araxes communities, comparisons of residential buildings exposed through large and horizontal excavations do not show considerable degree of differentiation as well. This enigmatic situation has led

some scholars to speculate that probably KACC was one of those that represents an egalitarian society (Kohl 2009b: 259). This situation has also caused less anthropological approaches in the Kura-Araxes scholarship.

Chapter 4. Excavations at Köhne Shahar

4.1. Introduction to Köhne Shahar and Environmental Settings

Compared to other regions in Iran, the north-western region enjoys a distinctly higher rainfall because of higher altitude and is one of the most populated areas in the country. Hence, cultivation occurs mostly in valleys, where there is shelter from the bitter winter winds and soil has accumulated. At higher altitudes, the climate is often too cold and precipitation decreases. Thus, two different life styles are seen in the region: pastoralism at higher altitude, and sedentism with agriculture mostly at lower altitudes. Pastoral groups usually breed sheep and goats with some cattle and a few horses. Agriculture emphasizes cereals such as wheat and barley (Fisher 1968: 8-13). However, at high altitudes, some pastoralists engage in small scale agriculture, cultivating alfalfa to feed their herds in order to complement pastures in dry seasons.

Today, the Chaldran area is predominantly a pasture land. Agriculture is practiced mostly in plains such as the Chaldran plain around 20km to the south of Köhne Shahar, the Avajiq plain (Kilisa Kandi) around 10km to the north, and in a smaller scale in river valleys. In close proximity to the site, it is hard to practice irrigation agriculture, and agricultural intensification is unlikely since there is a scarcity of land. Irrigation only became possible with the arrival of modern technologies such as tractors, pumps, and pipes.

Köhne Shahar is located 20km to the northwest of the city of Chaldran in the Western Azerbaijan province of Iran in a narrow valley between small plains and high pasturelands (Fig. 2). The site consists of a fortified citadel, a contemporaneous extramural kurgan cemetery, and a possible extramural residential area or "outer town." The site has a total area of approximately 15 hectares. The citadel, with an area of 2.5 to 3 ha., sits atop a natural basaltic platform. The platform is triangular and its location at the confluence of two rivers, Qizlar Chay and Beytal Chay, makes it naturally defensible (Fig. 3). In addition to two rivers, there are several springs around the site.

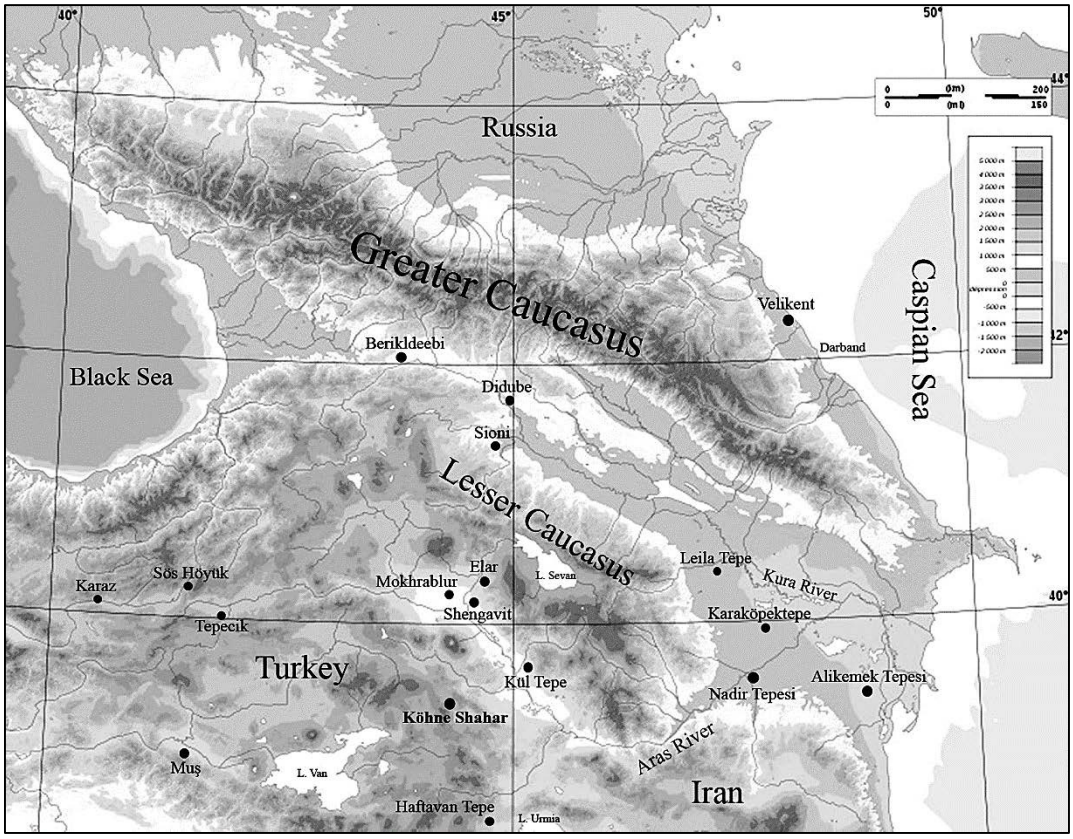

Fig. 2. Major Kura-Araxes sites in Caucasus and location of Köhne Shahar (modified map from wikimedia.org, location of the Kura-Araxes sites after Burney and Lang 1971, Kiguradze and Sagona 2003, Rothman 2003, Akhundov 2007, Sagona 1984, Smith 2005)

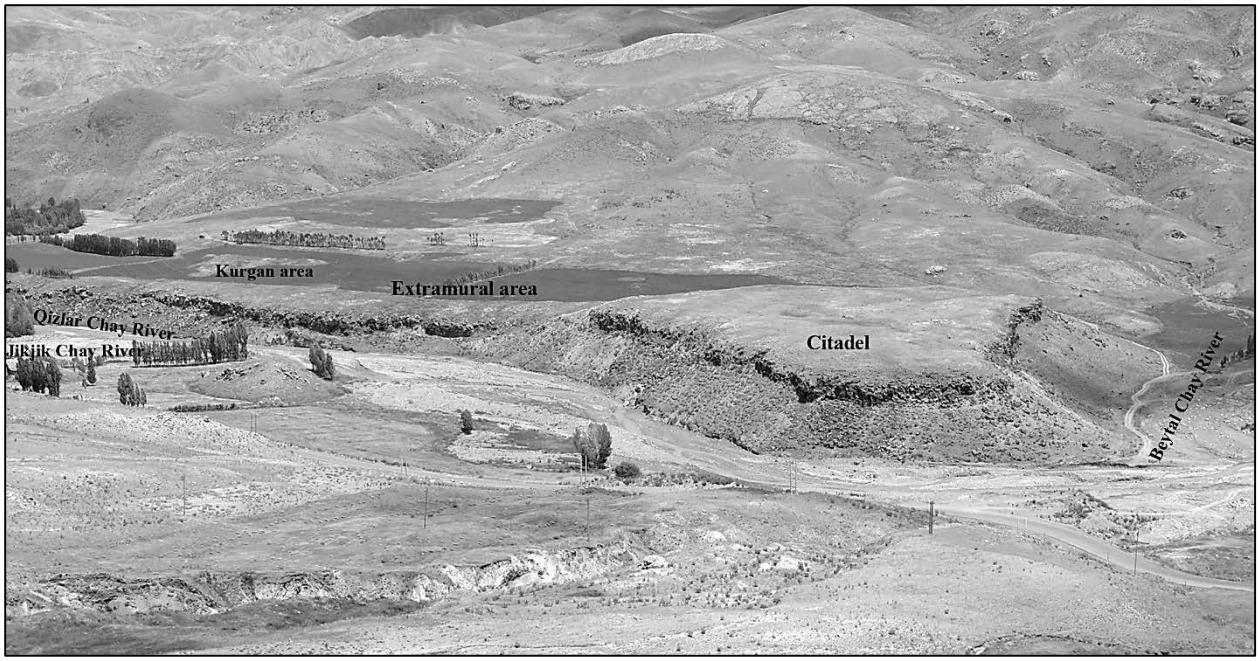

Fig. 3. View of Köhne Shahar from the south

The site sits atop a basaltic lava that may have been deposited by one or several volcanoes in the area, such as Ararat (Ağrı Dağ), Tendürek, and Yıgıt Dağı (Allen, et al. 2011: 1178; Kheirkhah, et al. 2009) and lies along the Gailatu-Siah Cheshmeh-Khoy Fault, which is recently dated to Quaternary, ranging from 1.87 to 0.4 Ma (Allen, et al. 2011: 1179-1180, 1186). Lava flows are the predominant geological features of the region (Allen, et al. 2011: 1186) and because of close proximity, probably lavas beneath and around Köhne Shahar were originated from Tendürek (see Kheirkhah, et al. 2009: 5). Lavas in the region flowed for tens of kilometers along pre-existing river valleys then "after eruption, the valleys were reoccupied by the present rivers, which have cut gorges on the scale of 10–50 m through the lavas" (Allen, et al. 2011: 1175). This phenomenon is well represented at Köhne Shahar where the lava beneath the

citadel was cut by two rivers, which presently flow about 20 m lower than the surface of the citadel.

Before excavation was commenced in 2012, the entire site and a great deal of surrounding area was surveyed three-dimensionally using a Leica FlexLine TS09 1”R400 Power Total Station. I also established a site bench mark at the highest point on the citadel and seven more stations as secondary bench marks on the citadel. In addition, I created a precise site grid aligned to magnetic north (see Figs. 4 and 5). Our survey in 2011 indicated that Köhne Shahar is most likely one of the largest known Kura-Araxes settlements. Surface ceramics collection also suggested that the site is all Kura-Araxes in date, with no other significant occupation of other time periods. Köhne Shahar is situated at E 44˚ 17' 46", N 39° 11' 20" at a height of 1905 meters above sea level; as determined with the use of a handheld Garmin GPS 12 Personal Navigator®.

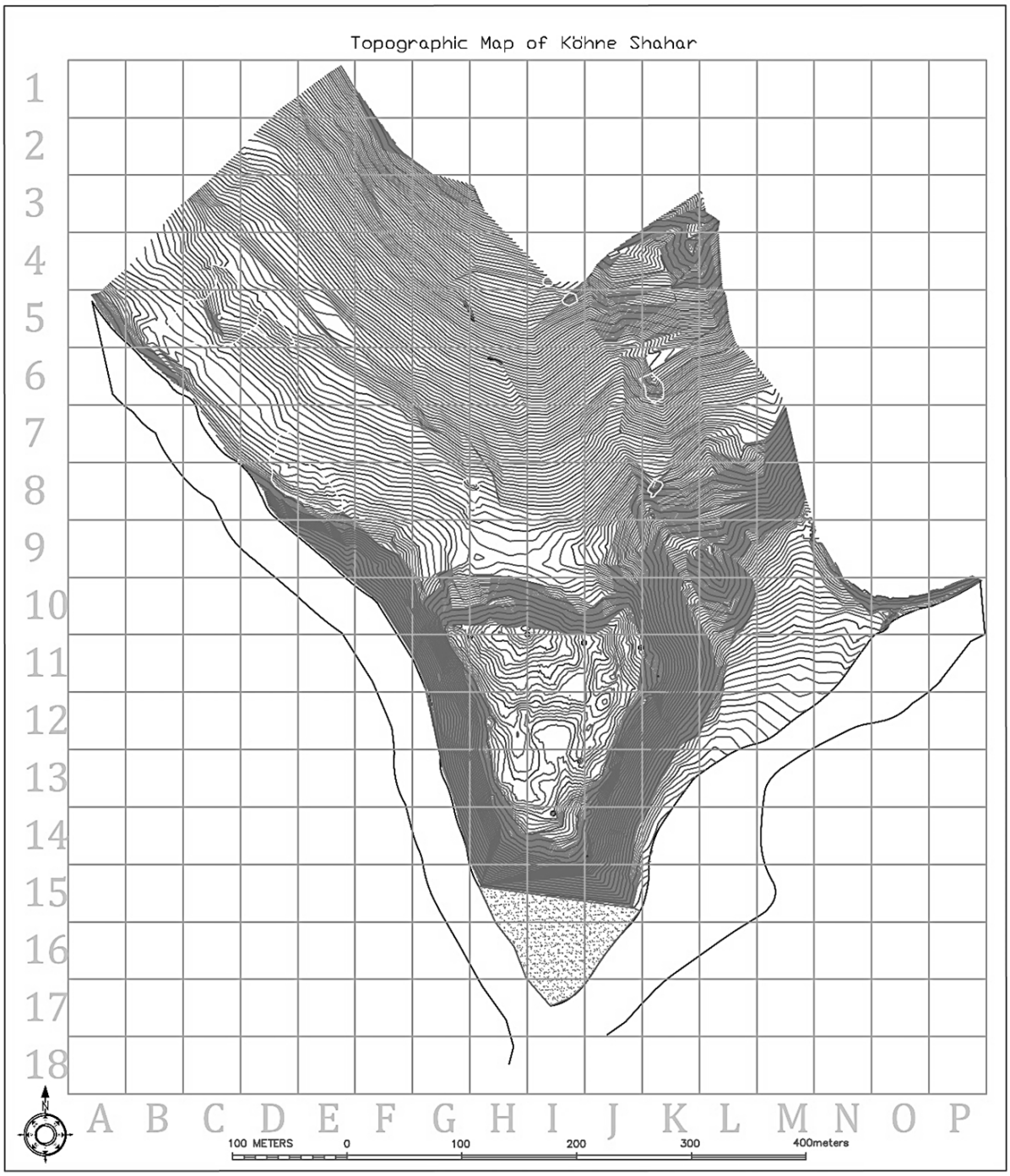

Fig. 4. Topographic map of Köhne Shahar

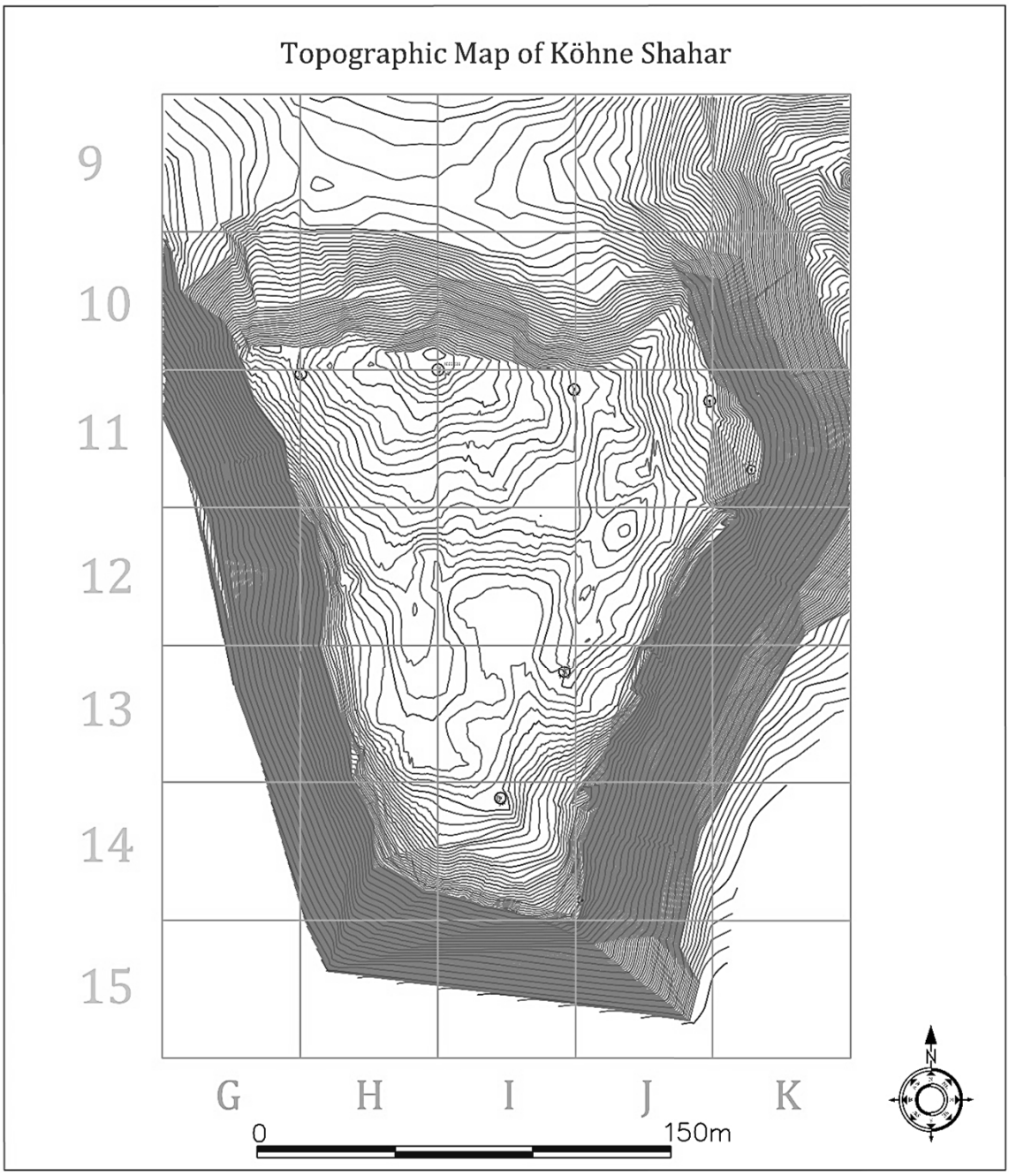

Fig. 5. Topographic map of the citadel of Köhne Shahar

The citadel is relatively intact but both the extramural area and cemetery have been significantly damaged by ploughing, flattening and transformation of earth for alfalfa cultivation during past few decades. Köhne Shahar was first surveyed in the 1970s by a German team (Kleiss and Kroll 1979). Except extensive surveys of the region by German team in 1960s and 70s whose primary focus was site of Bastam and the Urartian period (Kroll 2005; 2004b), no intensive survey had been carried out in the region generally, or in the immediate vicinity of Köhne Shahar. I visited the site in September of 2011, and surveyed it again after more than three decades.

The extensive surveys shows that while there are numerous Neolithic and Chalcolithic settlements around Urmia Lake to the south, they are rare to the north in mountainous areas (Kroll 2004b: 45; 2005). This means that probably the region was sparsely populated in time of the first occupation at Köhne Shahar. The surveys also indicated that Köhne Shahar is not the only Kura-Araxes fortified settlement, but it is the largest of the Kura-Araxes settlements in the regions (Kroll 2004b). Kroll (2004b: 46) consider Köhne Shahar a city with an urban organization which in this sense it is the only within the whole KACC in eastern Anatolia, Georgia, Armenia, and Azerbaijan.

I visited the site in September of 2011, and surveyed it again after more than three decades. In addition to its natural defensive mechanism, both surveys indicated that the site also has a fortification wall with "rounded towers" (some of them could be buttresses) that separates a densely built citadel or inner town from the more sparsely built extramural area. The structures are close to the ground surface, which facilitated mapping architectural, occupational, and public spaces such as a central "plaza" and radial alleyways of the citadel (Figs. 6 and 7). Although there might be some minor inaccuracies on the map drawn by Kleiss and Kroll, their map has

proven to be mostly accurate and reliable, especially in terms of gross outlines such as the location of the fortification wall and its towers, the alleyways, the central "plaza", and most other architectural features. Kleiss and Kroll (1979) argued that the site consists of an Early Bronze Age occupation and attributed it to the Kura-Araxes Culture. As they indicated, all surface ceramics in the citadel and the cemetery are typical of the Kura-Araxes material culture. To the east of the site, foothills might have been occupied by nomads in later periods, specifically in the Islamic era.

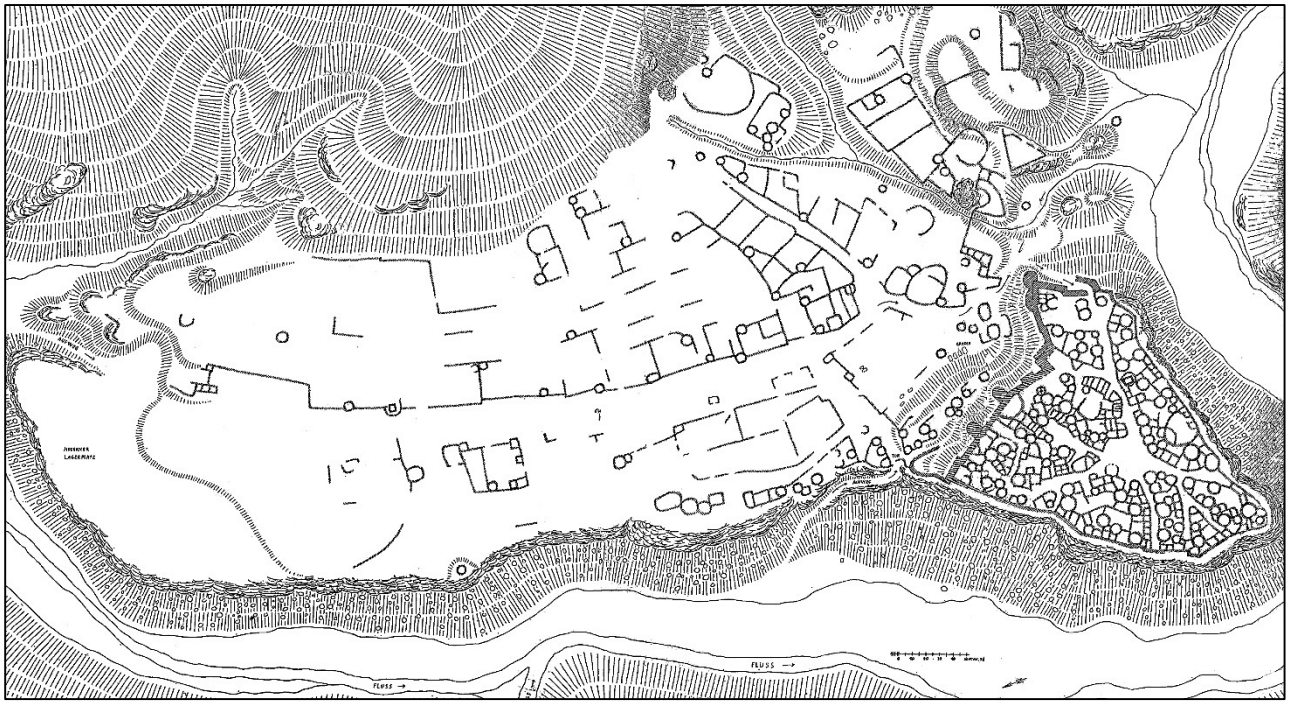

Fig. 6. Topography and plan of Köhne Shahar drawn by Kleiss and Kroll (1979)

Fig.7. Topography and plan of the citadel of Köhne Shahar drawn by Kleiss and Kroll (1979)

Many traits of the site, such as its nucleation around a citadel, its fortifications with towers, a possible communal area or "plaza" that could be used for public gathering and means for dissemination of ideology (see Billman 2001: 182),[9] and its sizable area in comparison to other contemporary sites, suggest that the site was a

[9] Prior to mass media technologies, ideology as one of means of exerting power could be physically received by followers in public areas and "plazas." In other words, public areas might be expressed materialization of ideology (Billman 2001: 182).

socially complex town founded in the highland area of Iranian Azerbaijan during the early 3rd millennium BC. In the summers of 2012, 2013, and 2014 I opened several trenches in the citadel, the cemetery, and in the extramural area. The first season lasted for five weeks in July and August 2012. A second season lasted for about eight weeks from late June to late August 2013 and the third season lasted for five weeks during August and early September 2014.

4.2. Excavations and Techniques

During three seasons of excavations at Köhne Shahar, I opened ten trenches on the site; one small test trench for stratigraphy (TT1) on the northern edge of citadel, two trenches on the cemetery (5B20 and 5C7), one large trench in the outer town (10G5), five large trench in the citadel (13J1, 13I5, 12I8, 12J21, and 12H25), and one small trench on the citadel (12I13) (see Table 2 and Figs. 8 - 9). After opening trenches, I also gridded them with 1×1m squares in order to ease recording recovered artifacts. I proceeded by the identification and removal of stratified deposits, which were the product of either anthropogenic or natural deposition. These deposits represent our excavation units and each unit was referred to as a locus or feature, which was delimited, excavated separately, and allocated a sequential ID number (see Table 2 below). In addition, I allocated an ID number to architectural spaces or rooms as well. The following chart shows how numbering/naming of deposits begins in each of trenches that I have opened during past three seasons of excavations.

Field Season	Trench	Loci	Features	Structures/Spaces	Notes
1st Season, 2012	TT1	L101	F01	---	2×7m
	13J1	L101	F01	S101	10×10m (only half of it was excavated)
	13I5	L201	F01	S201	10×10m (excavations in 13I5 continued and completed in the 2nd season)
2nd Season, 2013	12I8	L301	F01	S301	10×10m
	12I13	L601	F01		5×5m (this trench was excavated in the northeastern corner of square 12I13)
	5C7	L401	F01		6×6.50m
	5B20	L501	F01		5.90×5.60m
3rd Season, 2014	12J21	L401	F01	S401	10×10m
	12H25	L501	F01	S501	10×10m
	10G5	L601	F01	S601	10×10m

Table 2. Excavated trenches in the past three seasons

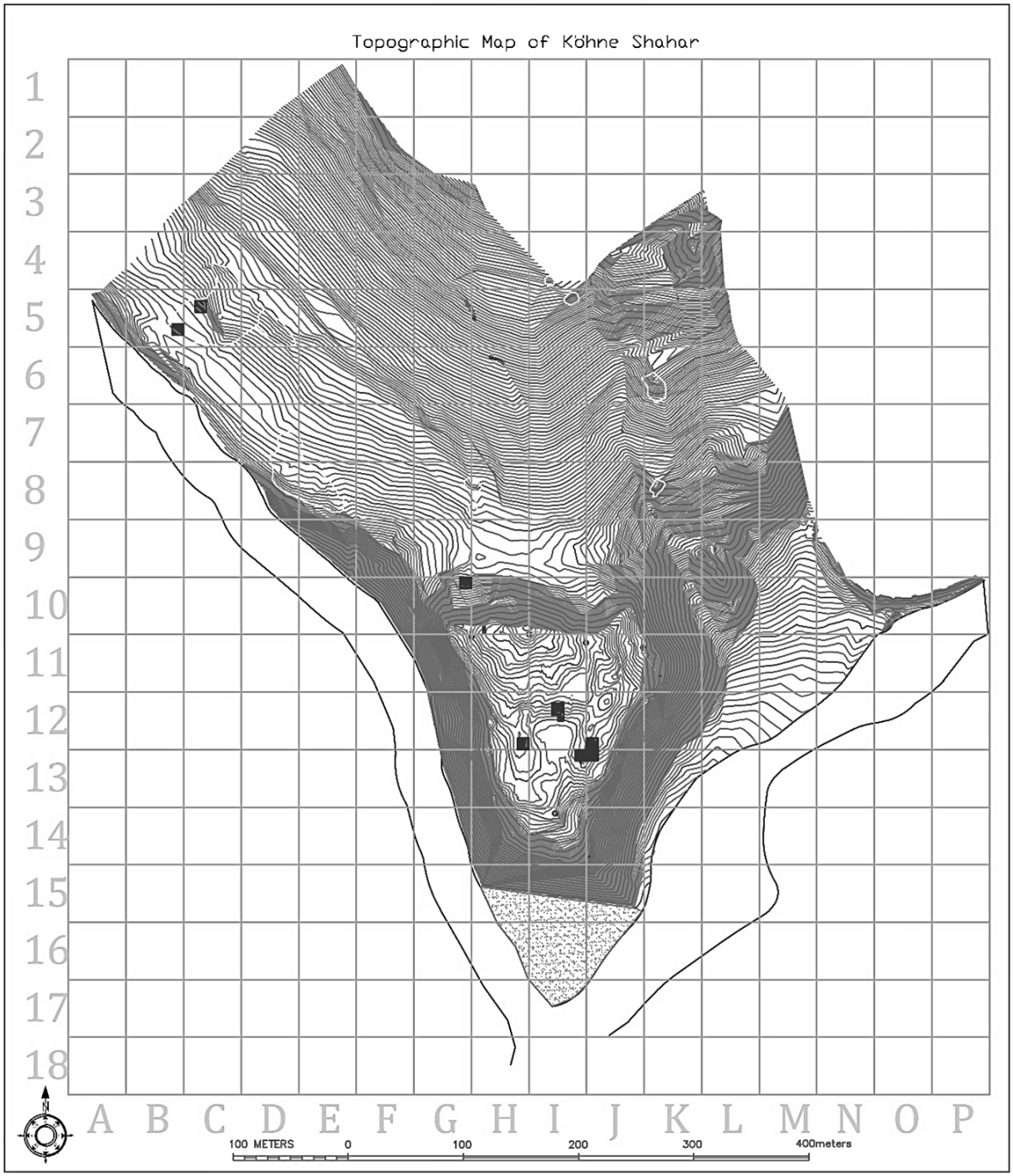

Fig. 8. Location of trenches at Köhne Shahar

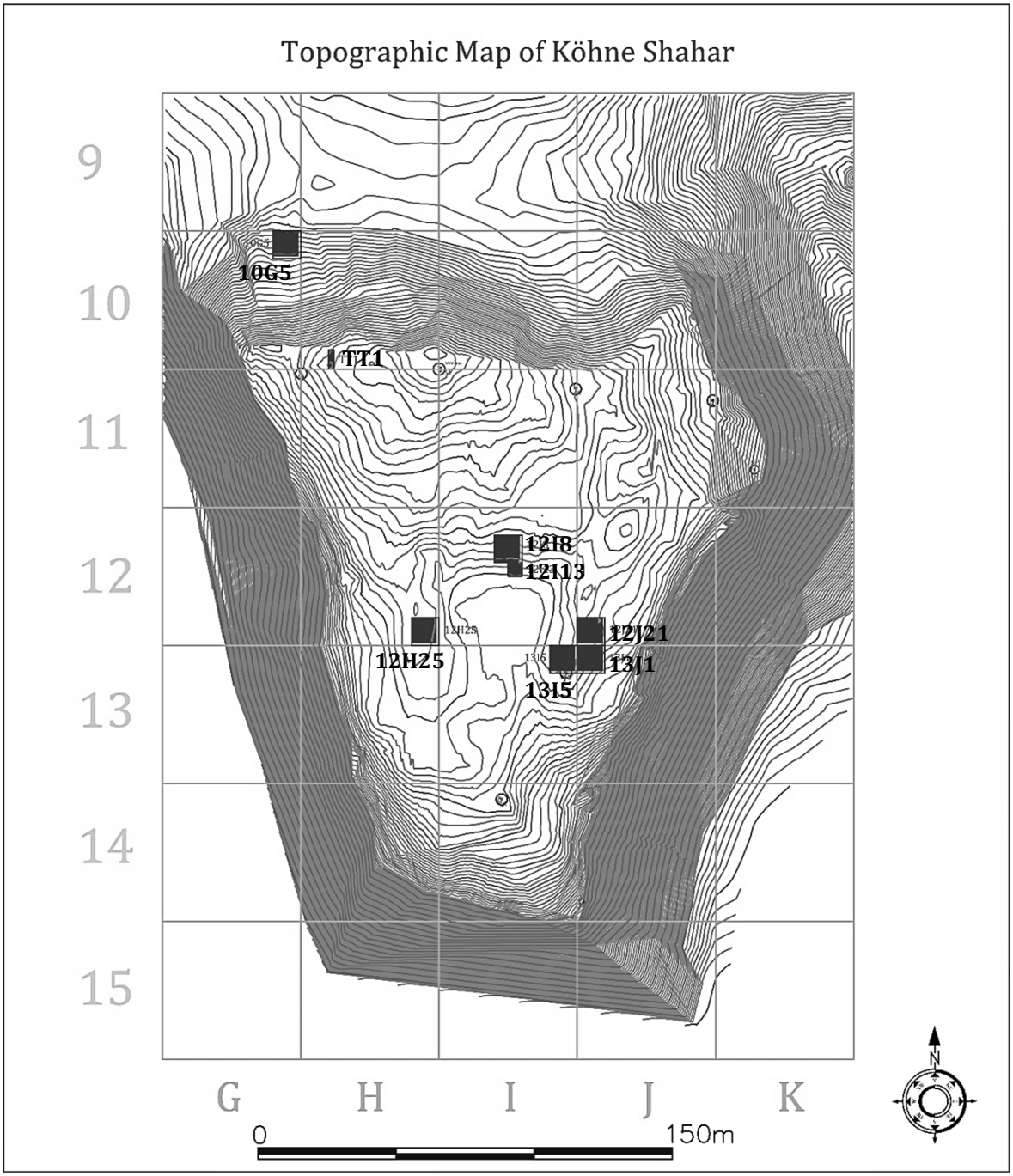

Fig. 9. Location of trenches in citadel, Köhne Shahar

The location and extent of each locus, feature, and architectural space was also drawn in plan in several sheets according to the procedure of excavation, and absolute levels were taken so that it could be defined in three-dimensional space. Moreover, the stratigraphic relationships between each of loci, features, and architectural spaces were recorded. Our excavations were relatively rapid, using hand picks, shovel, and trowel. All deposits were routinely examined by hand with a trowel, and also each was sieved before the matrix was discarded (except topsoil). Any cultural artifacts, bones or carbonized material recovered from a locus was places in a clean plastic bag with a label marked with site name, the date, the trench name/number, the sequential locus number, exact location of object recovered (in 1×1m squares within each of gridded trenches), and a short description of the type of object.

We have collected considerable quantities of carbonized wood and seeds recovered from most loci in TT1 and also from horizontal exposures. From each of architectural spaces we have taken soil samples and also soil to be floated for future archaeobotanical analyses. A selection of C14 samples from all trenches especially from test trench for stratigraphy will be submitted for radiocarbon dating.

According to the stratigraphic results in TT1, except in trenches 5B20 and 5C7 which were located in the cemetery area, in all trenches I concentrated on the last architectural phase at the site. This decision was in accordance with the goal of addressing social structures of the community that lived at Köhne Shahar. Thus, in each trench I concentrated on the last architectural phase and stopped excavations when we reached the surface floors in architectural spaces.

It should be also noted that three seasons of excavations revealed a considerable amount of data relevant to many issues and questions, many of them beyond those of social inequality,

which are the main focus of this dissertation. Thus, in order to avoid possible disorganization and confusions, I will concentrate on those materials that are relevant to the topic and will support my arguments.

4.3. Stratigraphy and Ceramic Typology

In order to understand the site's stratigraphy, and to build a chronological sequence of its occupation, one modest-sized (2x7m) test trench (TT1) was opened (Fig. 9 and 10). Moreover, it was essential to establish the contemporaneity of the fortification wall illustrated on Kleiss and Kroll's map (1979) with the occupational phases of the settlement. This was essential, because towers along the wall implied a possible militaristic function, which is rare in the Kura-Araxes period. There was a strong possibility that the fortification wall could have been constructed at a different, possibly later period. Hence, our aim in exposing the stratigraphy was twofold: establishing the chronological sequence of the settlement, and understanding the stratigraphic position of the wall (Alizadeh, et al. forthcoming).

Fig. 10. Opening a test trench for stratigraphy (TT1) in the citadel

TT1 was excavated to a depth of 2.5 m to the basaltic bed rock. Four major architectural phases were revealed in TT1 numbered 1 to 4 and a sub-phase numbered 5, from bottom to top (Fig. 11). Phase 1 is comprised of a stone fortification wall and its related occupational layers, while phase 2 is represented by a stone structure detected on the southern section of the trench. Phases 3 and 4 also consisted of circular stone structures. Remains of a linear wall (F01) was also detected on the western section of the trench just above the architectural remains from phase 4 (Figs. 12-15). At first I considered it phase 5 in the stratigraphy however, by the time that excavations went on in large trenches our understanding of stratigraphic nature of last phases changed. There are many reasons that suggest that sub-phase 5 represents a period in which new

buildings were added to the earlier buildings and in some cases earlier buildings were deformed and integrated in new buildings. Hence, phases 4 and 5 should be considered one single occupational phase that through time were expanded. In order to understand it, we need to look at relationships among buildings and their stratigraphic relations, especially in large trenches.

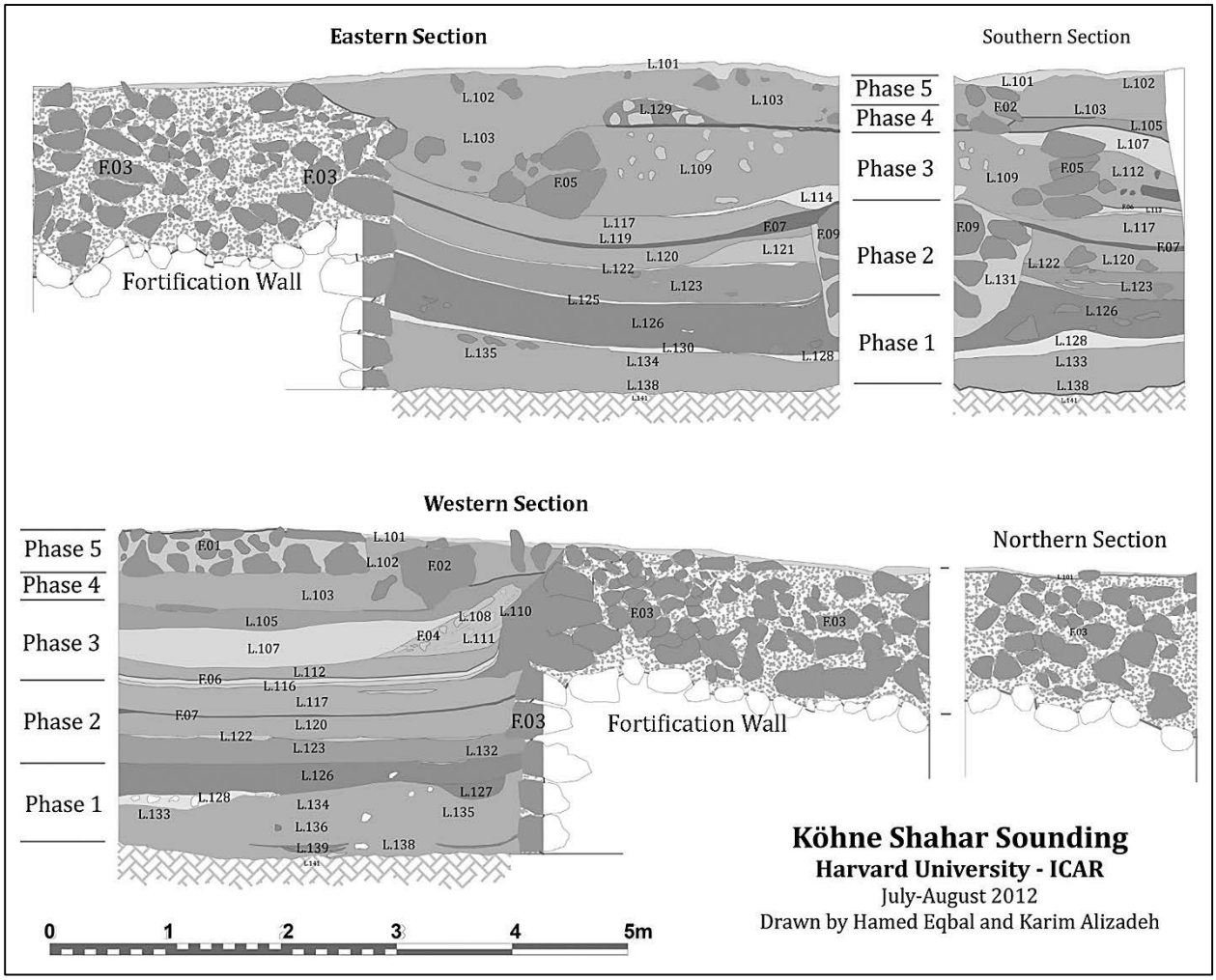

Fig. 11. Stratigraphy in TT1

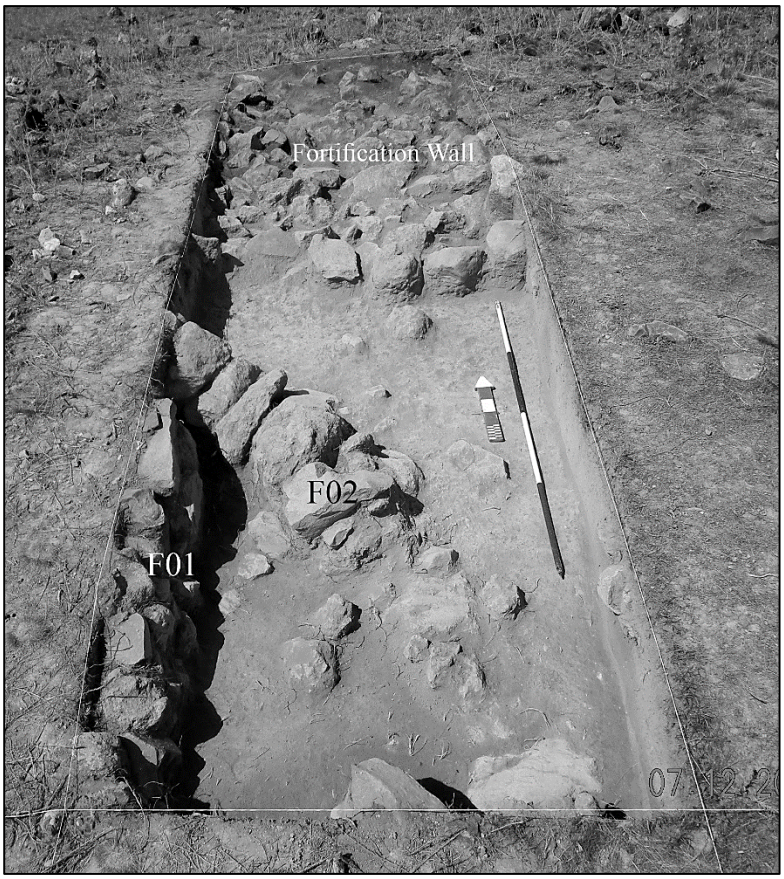

Fig. 12. TT1: Circular structure (F02) in phase 4 and sub-phase 5 with a linear wall (F01)

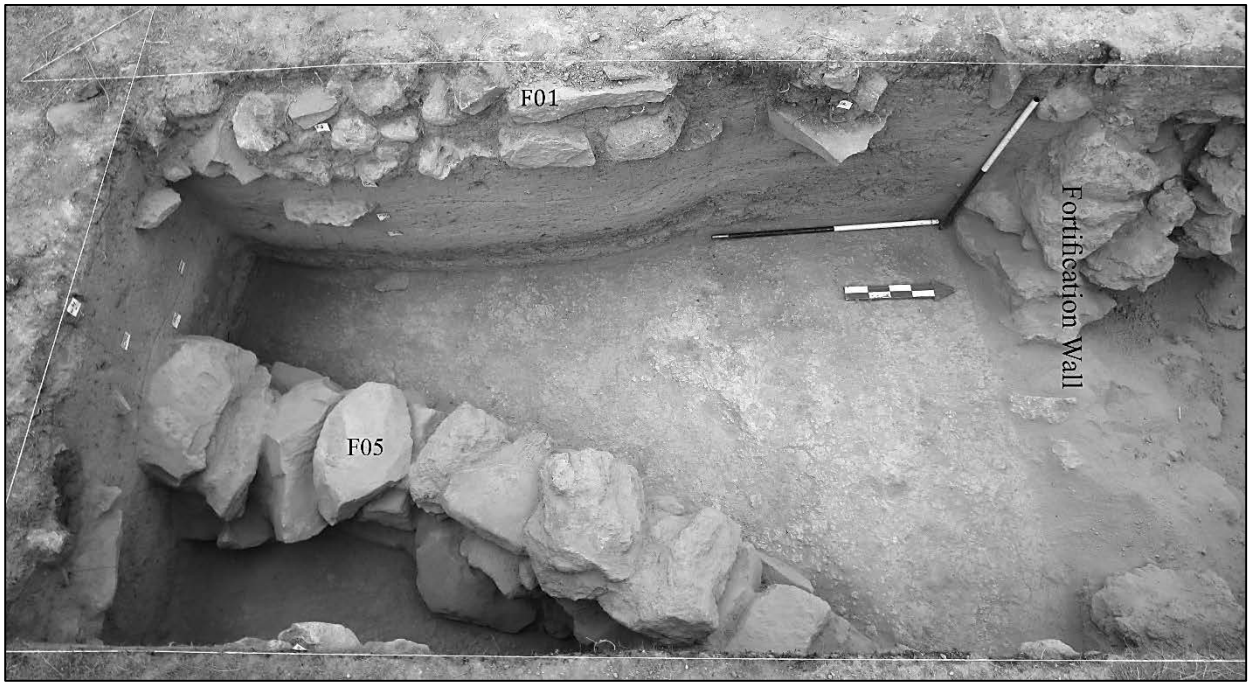

Fig. 13. TT1: Circular structure (F05) in phase 3

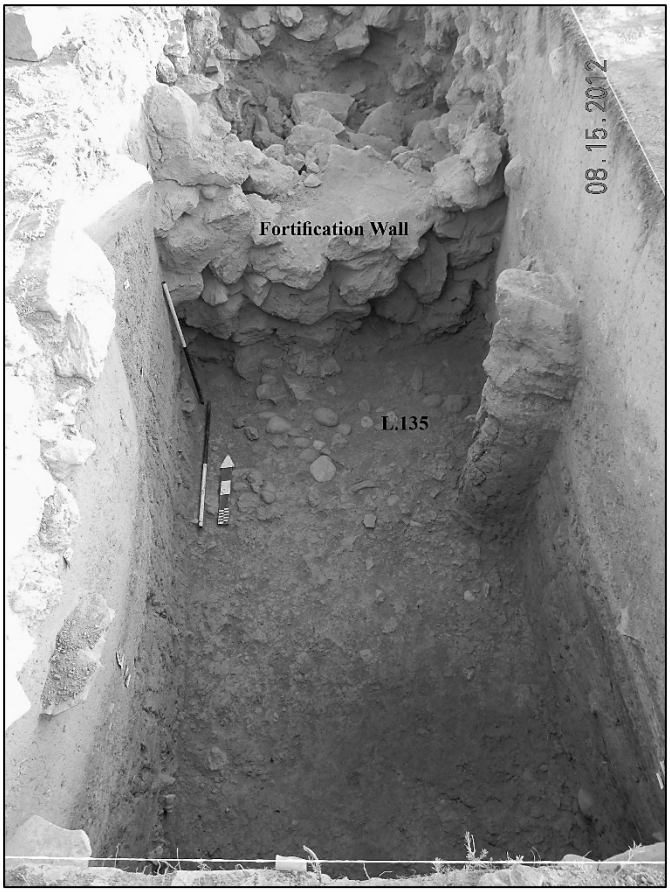

Fig. 14. TT1: Earliest occupational layers and the fortification wall

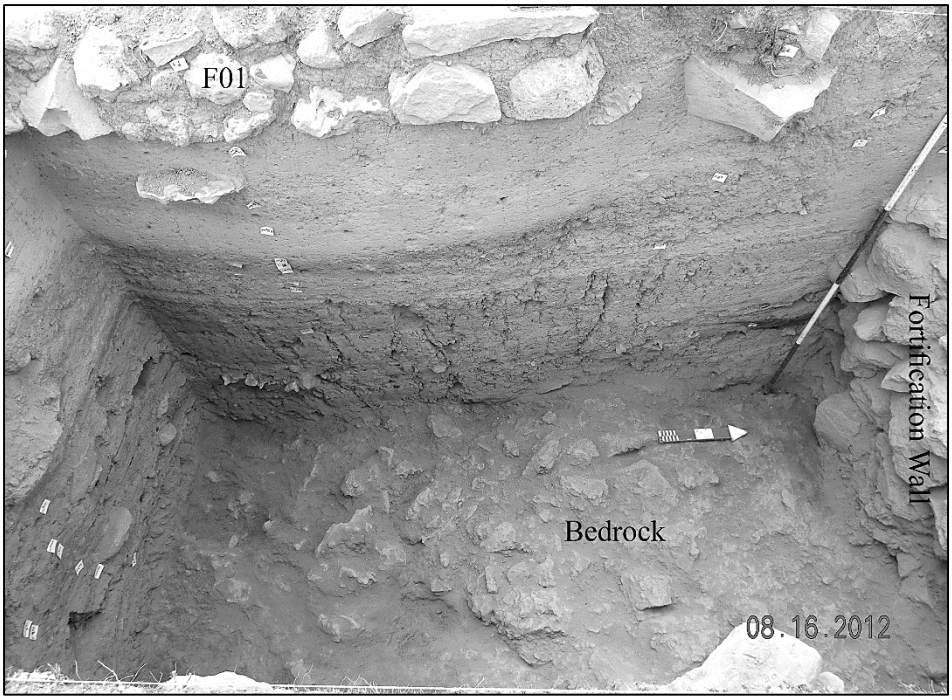

Fig. 15. TT1: Fortification wall and earliest occupational layers on bedrock

We need to open more soundings for stratigraphy in different areas of the site, particularly in outer town in order to explore details of occupation sequences. However, I think the stratigraphic results in TT1 is applicable to the entire site in general. This assumption is based on few reasons: first, intensive surveys at the site have not revealed any signatures other than Kura-Araxes, second, extensive surveys by the German team in 1970s indicated that except few sites in small plains, the regions was remained mostly unoccupied until the Early Bronze Age or Kura-Araxes (see Kroll 2004b), third, TT1 was opened in an area at the site where archaeological deposits are most likely thicker than any other areas. Therefore, I assume that the stratigraphic results in TT1 represents general sequence of occupation at the site, however, in details, some variations and differences might be possible in its different areas.

The ceramic collection from TT1 was relatively small, and due to the limited size of the sounding, it cannot be assumed that the pottery assemblages recovered from each phase are truly representative of the range of vessels that were being used during any of chronological phase. Nevertheless, the ceramic material that was uncovered provides a basis for building a relative chronology of the settlement, although we have yet to establish an absolute chronology of the site. About 200 shards were collected from TT1.

A selection of the ceramic collection from TT1, from the earliest locus (L139) to the topsoil (L101) is illustrated in Figures 16-21.[10] Ceramics are handmade, grit-tempered (sometimes chaff is seen in their inclusions), and well-fired. The great majority of them have mica in the paste. Paste color varies from a predominant grey and dark grey with sometimes orange and brown, and rare buff ceramics. Grey ceramics are mostly burnished sometimes

[10] Complete report of the first season of excavations at Köhne Shahar including the stratigraphy trench and two other large trenches would come out later.

bearing elaborate ornamentations. "Dimples" and "grooves" (Fig. 16:1-3; Fig. 17:3; Fig. 19:3; Fig. 20:4) with parallels at Geoy Tepe (Burton-Brown 1951; Sagona 1984),[11] "dimple-and-groove" (Fig. 20:3) with parallels at Karaz (Sagona 1984)[12] are common decorations on grey burnished ceramics.

Incised decorations, appliqué (Fig. 20:4) with parallels at Yanik Tepe (Summers 1982)[13] are also often seen on grey ceramics as well. Typical of Kura-Araxes culture, "Nakhichevan lugs" (Fig. 16:4, Fig. 20:1) with parallels at many of Kura-Araxes sites, sometimes Nakhichevan-like lugs (Fig. 16:6) with parallels at Yanik Tepe (Summers 1982),[14] and many small decorative Nakhichevan lugs with parallels at Geoy Tepe (Burton-Brown 1951)[15] are also very common on ceramics. Incised decorations (Fig. 21: 1, 3-4) as one of characteristics of Kura-Araxes III phase (see Sagona 1984: 102-103; Rova 2014: 53) along with small decorative Nakhichevan lugs (Figs. 30:2; 36:3; 43:2; 58:6; 64:2,6; 78:1) only appear in the last two phases at the site (L107 and after). This corresponds with our argument about chronology of the site and further points that the last two phases of the site correspond with Kura-Araxes III.

[11] Burton-Brown 1951, Fig.9:294, Fig.10-12, ; Sagona 1984, vol.3, Fig.12:8; Fig.13:4, Fig.26:3,
[12] Sagona 1984, vol.3, Fig.12:4, Fig.14:2
[13] Summers 1982, Fig. 10:10, Fig.135:14
[14] Summers 1982, Fig. 146:7;
[15] Burton-Brown 1951, Fig.12:538

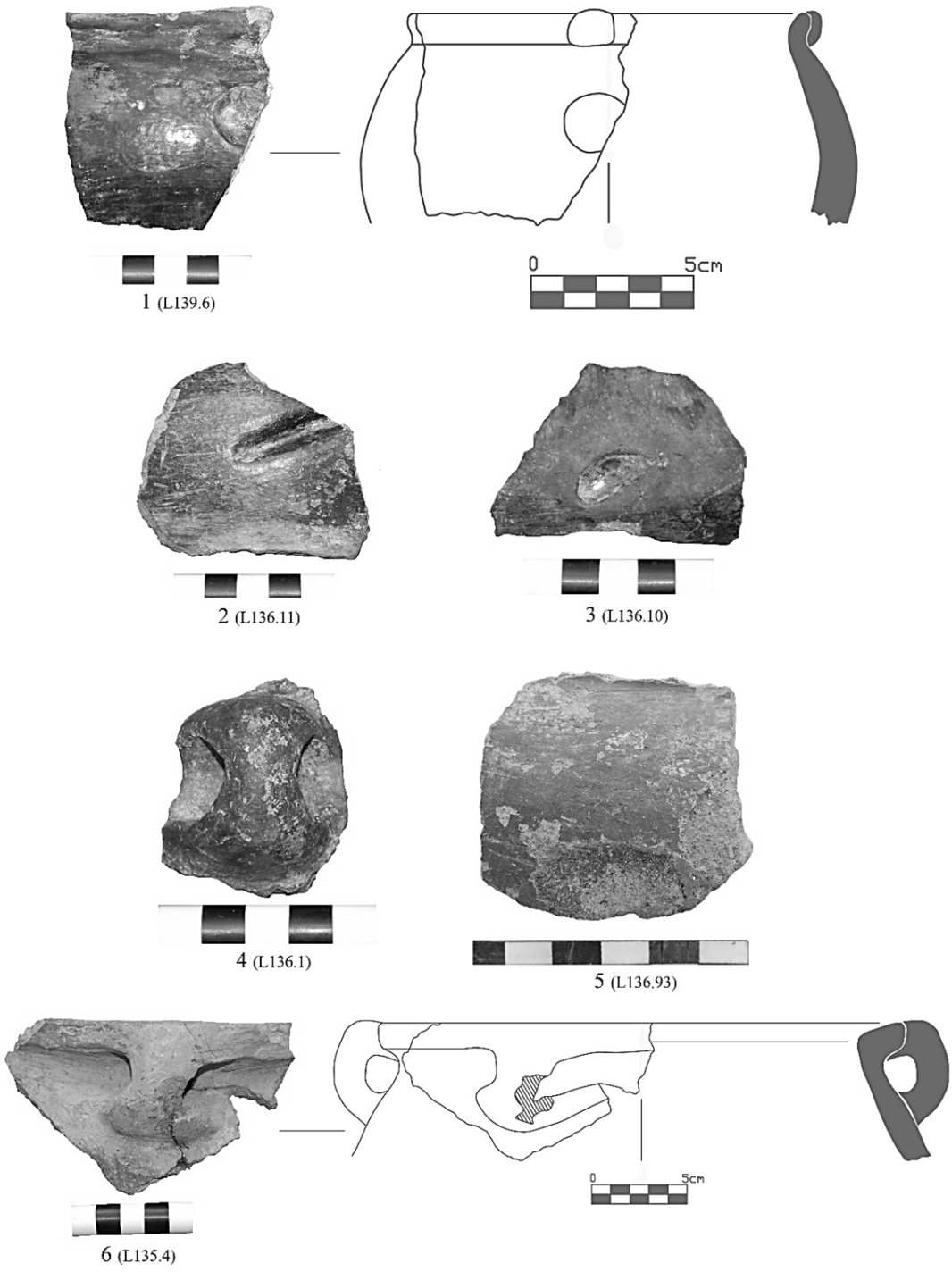

Fig. 16. Ceramics from TT1

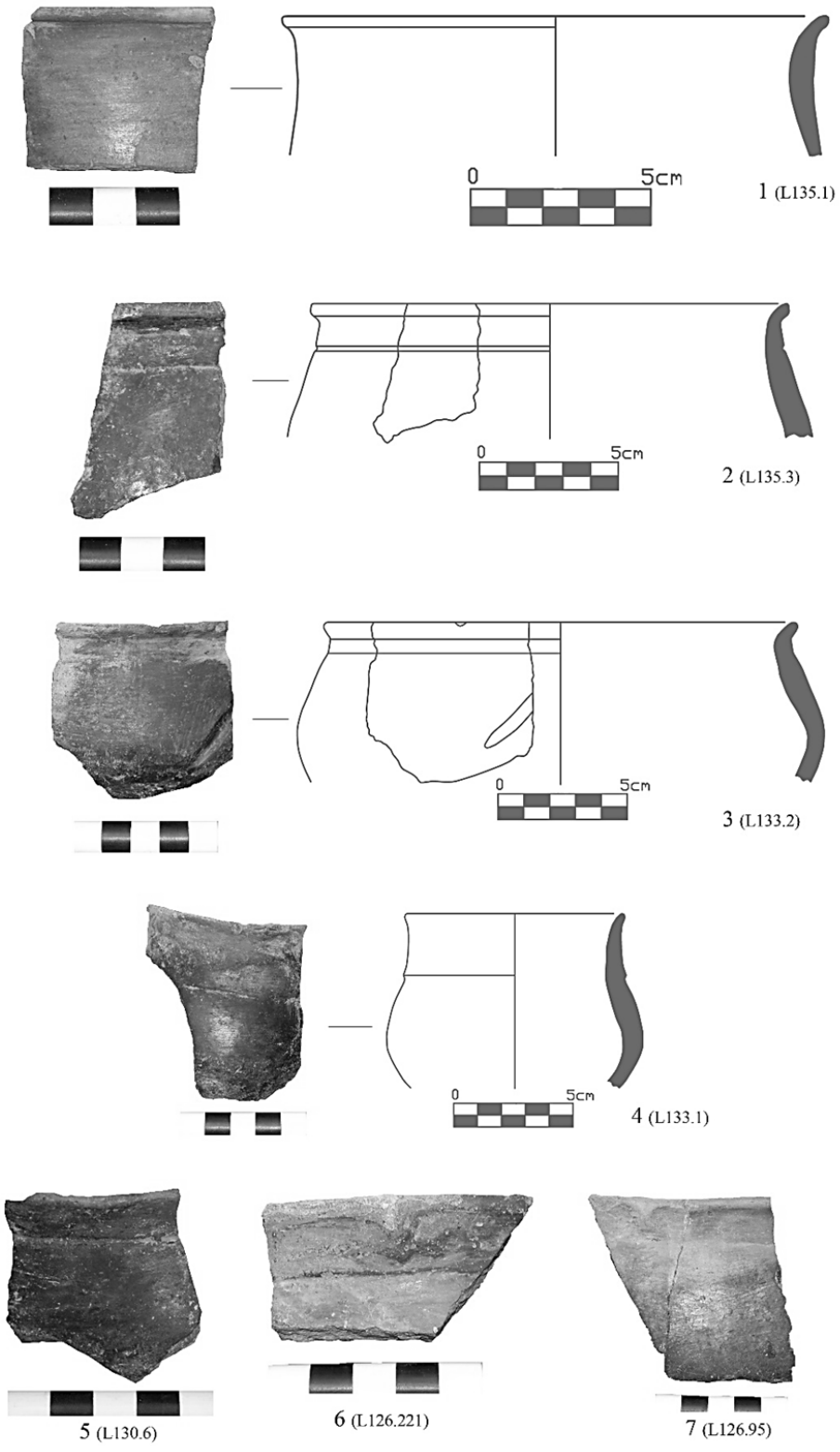

Fig. 17. Ceramics from TT1

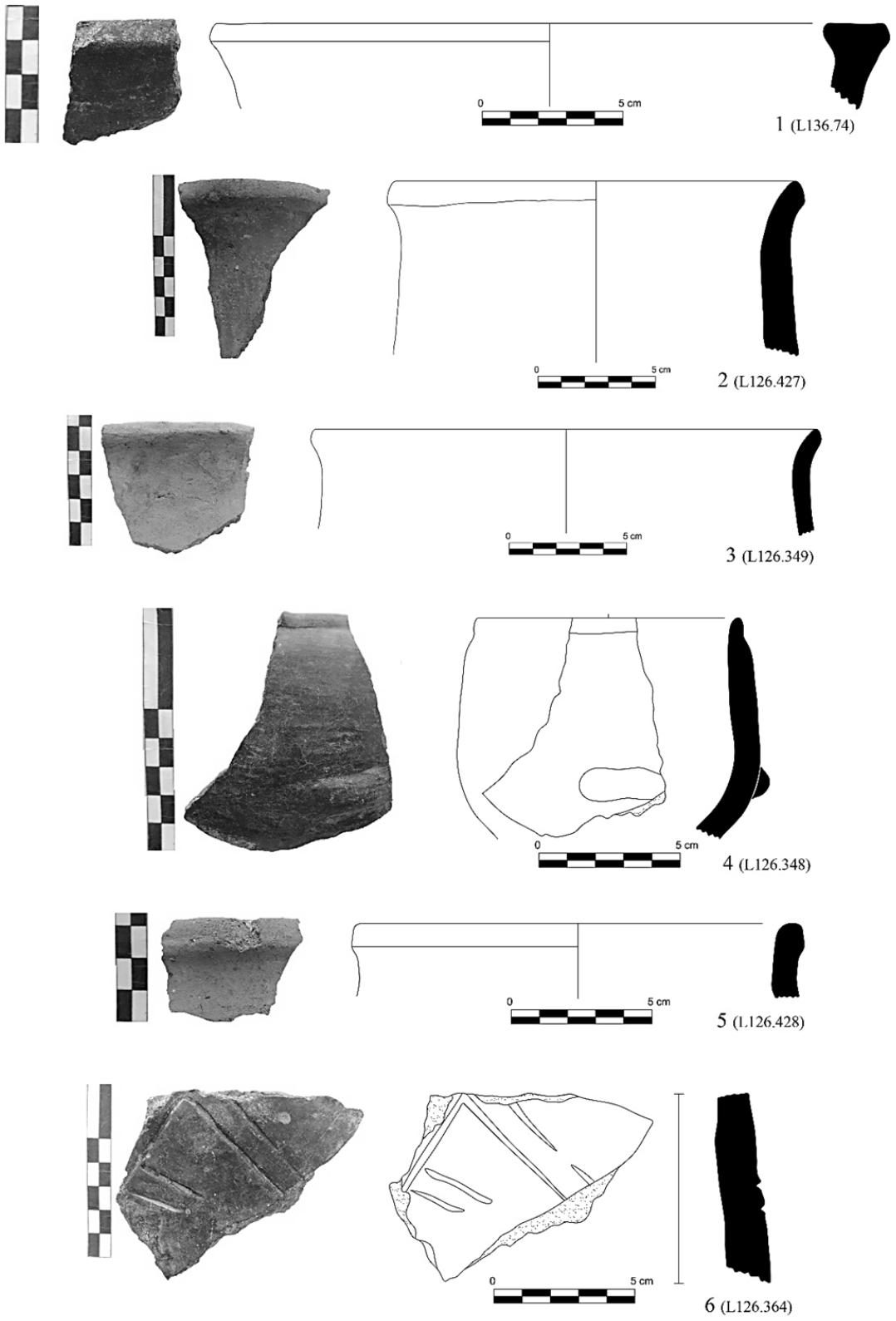

Fig. 18. Ceramics from TT1

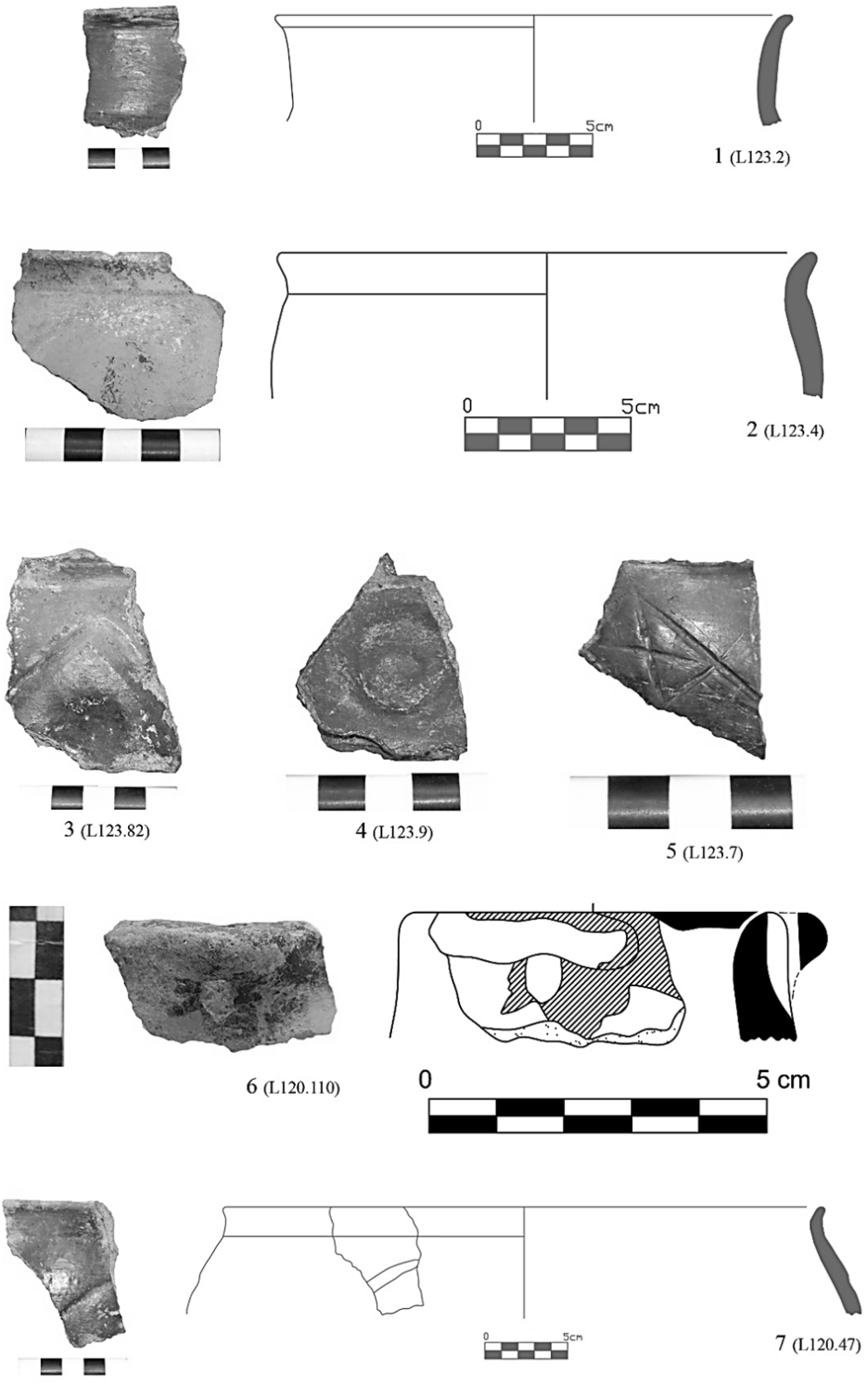

Fig. 19. Ceramics from TT1

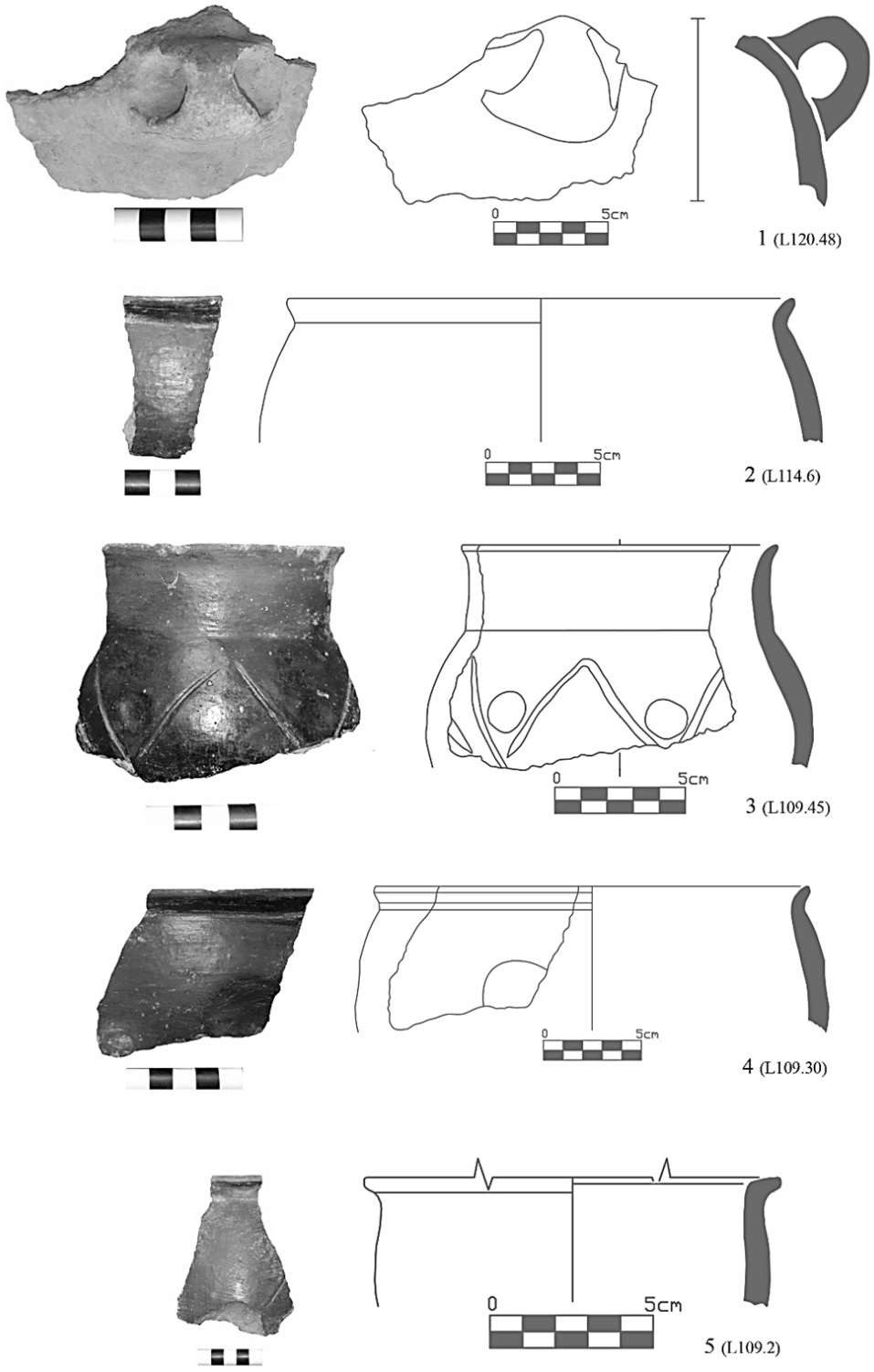

Fig. 20. Ceramics from TT1

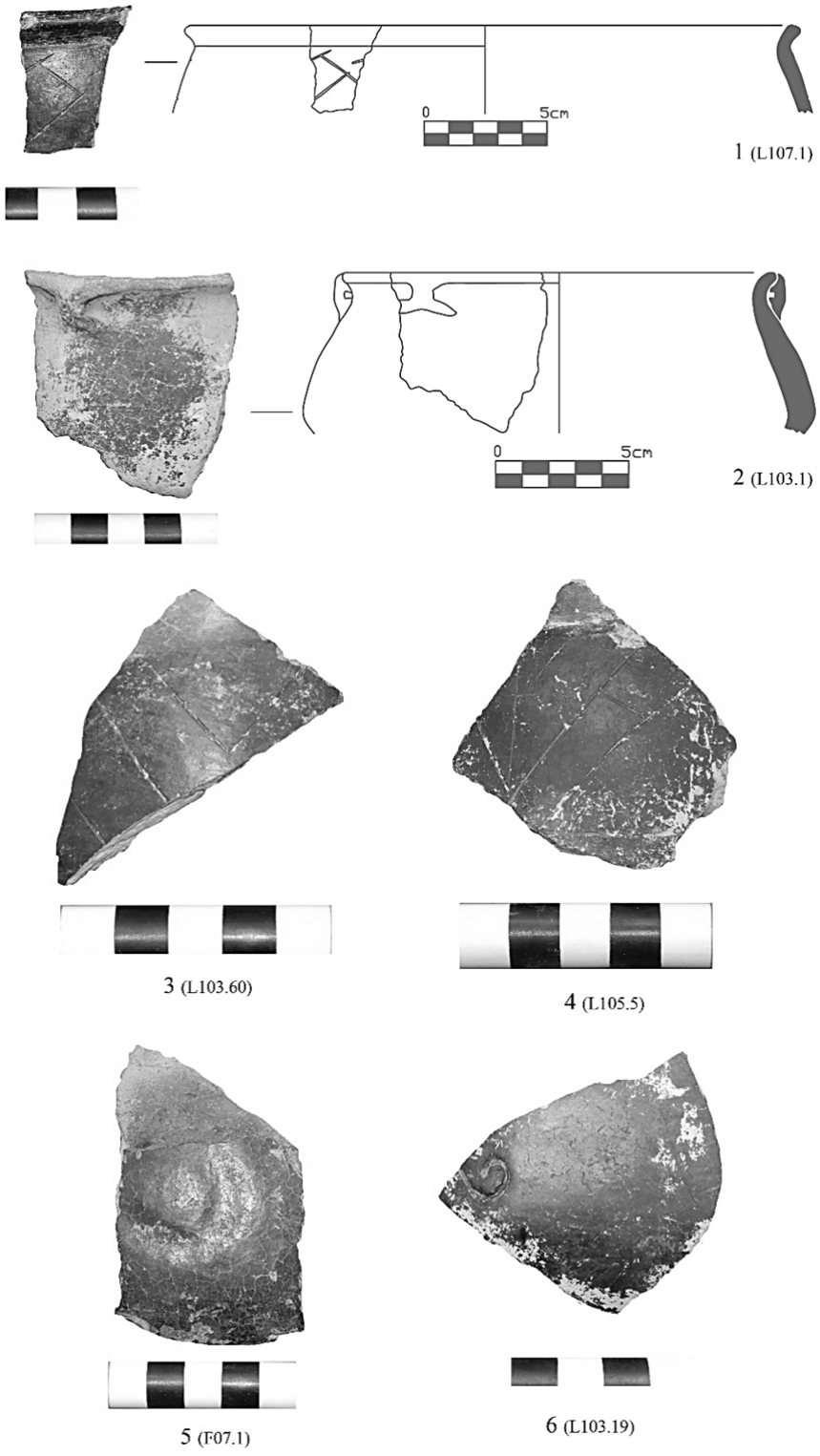

Fig. 21. Ceramics from TT1

With a few exceptions all ceramics represent typical Kura-Araxes ceramics. Overall, parallels found for the limited ceramic assemblages from TT1 point to the Kura-Araxes phases II and III mostly similar to south Caucasian and east Anatolian styles rather than Yanik Tepe and Godin Tepe in northwest and west of Iran.

Some painted and slipped ceramics (i.e. Fig. 16: 5, Fig. 19: 2, 6) were also recovered from both the sounding trench, and mostly from large horizontal trenches. Some of them are made with buff and orange past, usually with red slip or brown clay covering. Painted ceramics are rarely seen in the Kura-Araxes contexts, examples of which include shards from Kvatskhelebi, Beshtasheni, and Ozni in Georgia (Dzhavakhishvili and Glonti 1962; Kuftin 1941; Sagona 1984: vol.2, Pl. VII: 7, 8; Zhorzhikashvili and Gogadze 1974).

The painted ceramic collection at Köhne Shahar is small and clear parallels for them are hard to find.[16] However, the closest contemporaneous culture with painted ceramic tradition was probably communities of Ninevite V period in northern Mesopotamia. Some common motifs in painted ceramics such as wide horizontal bands on the rims and necks of vessels and possible bird motifs (Alizadeh, et al. forthcoming) seem comparable to some of Ninevite V ceramics (Grossman 2014: Pl. 1:2; Numoto 1991; 1994: Fig.2: 15). Since Kura-Araxes communities did not have a tradition of painted ceramics, it seems that Köhne Shahar may have engaged with communities of Ninevite V.[17] I am not suggesting that all of the painted ceramics at Köhne Shahar are of the Ninevite V type; there are a few painted ceramics found in trenches on the

[16] Although the collection of painted and slipped ceramics is very small and does not allow us to compare in detail, we can easily say that they are not similar to later painted ceramic traditions in the region such as "Urmia Ware" or Haftavan VI (Edwards 1983, 1986) and Early Bronze Age painted ceramic traditions of Urmia basin and Hasanlu (see Tala'i 1984; Kroll 2004, 2005: 117-118 also personal communications with Stephan Kroll; Swiny 1975).
[17] I am particularly grateful to Antonio Sagona, Mitchell Rothman, and Stephan Kroll who generously shared with me their rich knowledge of the ceramics of the region. For ceramics of Ninevite 5 see also Numoto 1991; 1994

citadel, and especially from one of burials that shows Kura-Araxes forms with typical "Nakhichevan lugs." These suggest local production, and are characterized by orange paste and painted decorations on the exterior surface.

Given chronologies of Kura-Araxes II and III (Glumac and Anthony 1992; Palumbi 2008b; Gopnik and Rothman 2011; Sagona 1984: 125-126; 2000a)[18] our small ceramic collection from stratigraphy suggests that the site could have been occupied sometime between the very end of the fourth/beginning of the third millennium and mid-third millennium BC (see also Table 3 below).

Stratigraphy and Chronology at Köhne Shahar		
Stratigraphic Phases	Chronological/Cultural Phases	
Phase 5	Kura-Araxes III	2400/2300 BC
Phase 4	Kura-Araxes III	
Phase 3	Kura-Araxes II	
Phase 2	Kura-Araxes II	
Phase 1	Kura-Araxes II	3300/3200 BC

Table 3. A Suggestive chronology for occupations at Köhne Shahar.

[18] Also for possible connections with Ninevite V in northern Mesopotamia see Grossman 2014: 88-89; Rothman 2001; Schwartz 1985

Fortification Wall

Not only protruded round towers are not known in Kura-Araxes and the Early Bronze Age of Caucasus or greater Caucasus, but even dimensions and the way it is constructed (material such as rubble core, double faced masonry) did not look like a technique of Bronze Age construction. Rather it looked like an Urartian technique.[19] The careful examination of the earliest archeological layers of TT1 demonstrated that where the matrices make contact with the fortification, the deposits tilt upward (Figs. 11 and 22). In other words, the earliest deposition layers abut the fortification wall. For instance, the earliest loci such as L.137, L.135, and L.127 (see Figs. 11 and 22) at the very end tilt upward because they meet the vertical surface of the wall. This indicated that the horizontality (Harris 1989: 31-32) of the earliest layers was changed by an interfacial feature, the fortification wall. It should also be noted that there is no indication of a foundation trench cut into the occupational layers.[20] The upward tilt of the earliest layers suggests that the construction of the fortification wall took place earlier than the formation of the earliest archaeological deposits inside the citadel. The presence of the upward tilt throughout all occupation phases suggests that the fortification wall was in use until the site's abandonment in Phase 5.

[19] I am grateful to Adam T. Smith who generously shared his insights with me through email exchanges.
[20] This does not mean that the wall lacks any foundation. In order to examine the wall's foundation, aside from cutting through its abutting depositions it could be ideal if we cut the wall itself as well. This could enabled us to see its possible foundation and both exterior and interior surfaces. At the very beginning of the field season we tried to cut the wall and depositions all together but the more we dug the larger stones we faced. Thus, we gave up cutting the wall in the middle and focused only on inside the wall and examining interfaces between the layers and surface of the interior surface of wall. This is why we missed have pictures of complete interior surface of the wall.

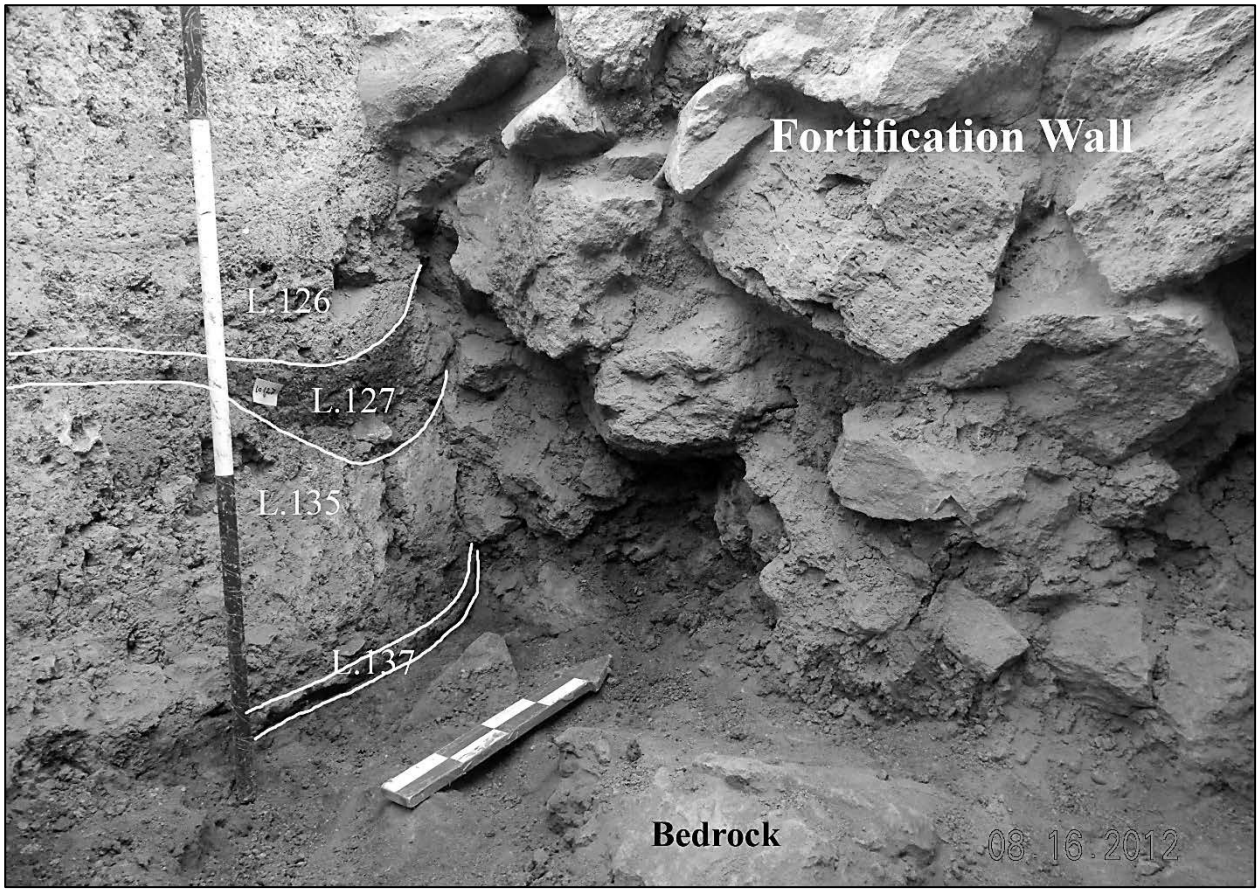

Fig. 22. TT1: Earliest occupational layers and their relationship with the fortification wall

The fortification wall was preserved to a depth of 2.5 m. The exact original width of the wall is unknown, but it should have been at least 2.5m wide. Excavations revealed that it was made of large rough blocks of basalt on the façade, with smaller stones in the middle. There are more evidence of walls at some other Kura-Araxes sites such Yanik Tepe (Summers 2004: 623; 2013: 60-70) in NW Iran, Tel Bet Yerah in Levant (Greenberg, et al. 2006; Greenberg and Paz 2005), Shengavit, Adablur, and Mokhrablur (Areshian 2005: Fig.14, Fig.21:C; 2007: 33. 37) in the Armenia, although in some cases either the state of their contemporaneity with respective

Kura-Araxes deposits is unclear, or their nature is not well understood yet.[21] Materials representing militarism and defense mechanisms are rare in Kura-Araxes sites. This may suggest that this was a nonviolent period, compared to later periods, especially Late Bronze and Early Iron Ages (Kohl 2007: 90; Kushnareva 1997: 74-75). Köhne Shahar represents an example of the clear attribution of a fortification to the Kura-Araxes Culture.

Surveys indicated that a fortification wall was constructed in the northern side of the citadel. The wall and its protruded towers are clearly visible on ground. Because of erosions in the northwestern corner of the citadel, careful ground observations indicated that at least one of the towers in the northwestern corner of the citadel was round. If its circuit were completed only as far as the beginning of the cliffs in the eastern side of the citadel and did not go on the edge of cliffs, its length would have been about 245 meters. At a constant minimum height of 4 meters and width of 2.5 meters, this would represent about 2450 cubic meters of cobble stones. This estimation does not include the volume of towers.

Estimating labor/day required to construct Jericho's wall, Peter Dorrell (1978: 15) argues that "a modern builder of dry-stone walls expects to construct 4.5 to 5m of 1.4m high wall in a working day given good stone. At an average thickness of 50 cm, this amounts to about 3.3 cubic metres. By this standard 4,500 cubic metres would require 1360 man/days. This is a surprisingly modest requirement - about a week's work for 200 able-bodied men - and clearly well within the capabilities of even the minimum population estimate. To plan and organize the enterprise, to clear the site and quarry the stone, must have called for considerably greater

[21] i.e. Sos Höyük in north-easter Turkey (see Sagona 2000; Sagona, et al. 1997; Sagona, et al. 1998; Sagona and Sagona 2000) and some other examples such as Shengavit and Mokhrablur in Armenia (see Areshian 2005; Kushnareva 1997: 74-75). Although the wall at Sos Höyük is clearly associated with the Kura-Araxes settlement, however it is not a defensive in nature. Here I would like to thank Antonio Sagona who generously shared his insight on the wall at Sos Höyük through email exchanges.

numbers, but, it seems likely, still of the same order of magnitude." If we use the same standards to estimate labor/day required for construction of the fortification wall, 2450 cubic meters of cobble stones could require 742 man/day and about a week's work for 106 man.

4.4. Horizontal Excavations

In order to gather data on social conditions and possible socio-economic differentiations within the community of Köhne Shahar, there was also a need for horizontal exposure. Therefore, during three seasons of excavations I also opened five large (10x10m), one small (5x5m) trenches in the citadel, and one large trench (10x10m) outside of the citadel in outer town (see Table 2 and Figs. 8-9).

All trenches revealed remains of architectural spaces and associated materials and deposits. Architectural remains from large trenches[22] correspond with the latest occupational phase of the site in TT1, Phase 4 and its sub-phase 5. What has been uncovered are footings or lower parts of walls and buildings. Plans of buildings uncovered in horizontal excavations are both circular and rectangular. Mostly they are preserved to about 70 to 80 cm height. All of them were built of unworked stones, either basalt cobblestones or limestone cobbles. The upper part of the walls could have been made of either mud-bricks or **pisé**. However, mud mortar was used among cobbles in the lower walls. All stone walls were usually mud-plastered. Evidence for the roofing of the buildings is not conclusive.

[22] The stratigraphic situation of architectural remains from a small trench (trench 12I13) still require further analyses.

Fragments of clay with impressions of sticks or woods on them allow us to speculate about roofing of these buildings. Probably roofs were made from sticks or woods coated with mud. Except for the large circular building (S401) in trench 12J21, there was no evidence for posts or stakes supporting the roof. Although the function of each building requires more analyses to determine, based on associated features and materials, we can speculate. The most striking thing is that all large trenches in the citadel revealed evidence of workshop units and production activities. In the following, a description of each of these workshops is provided.

Structure 101 (trench 13J1): In 2012 I opened two large 10x10 m trenches (13J1 and 13I5) on the citadel, close to its southeastern edge, and in a neighborhood to the east of the central plaza (Fig. 9). These two trenches were excavated to a depth of approximately 70-75 cm. In trench 13J1, due to the erosional loss of in-situ material in its southeastern portions, I only focused on more reliable data from its northwestern corner. Three architectural spaces were uncovered in this trench, S101, S102, and S103 (Figs. 23 and 24). For the same reason S101 was not uncovered *in toto*.

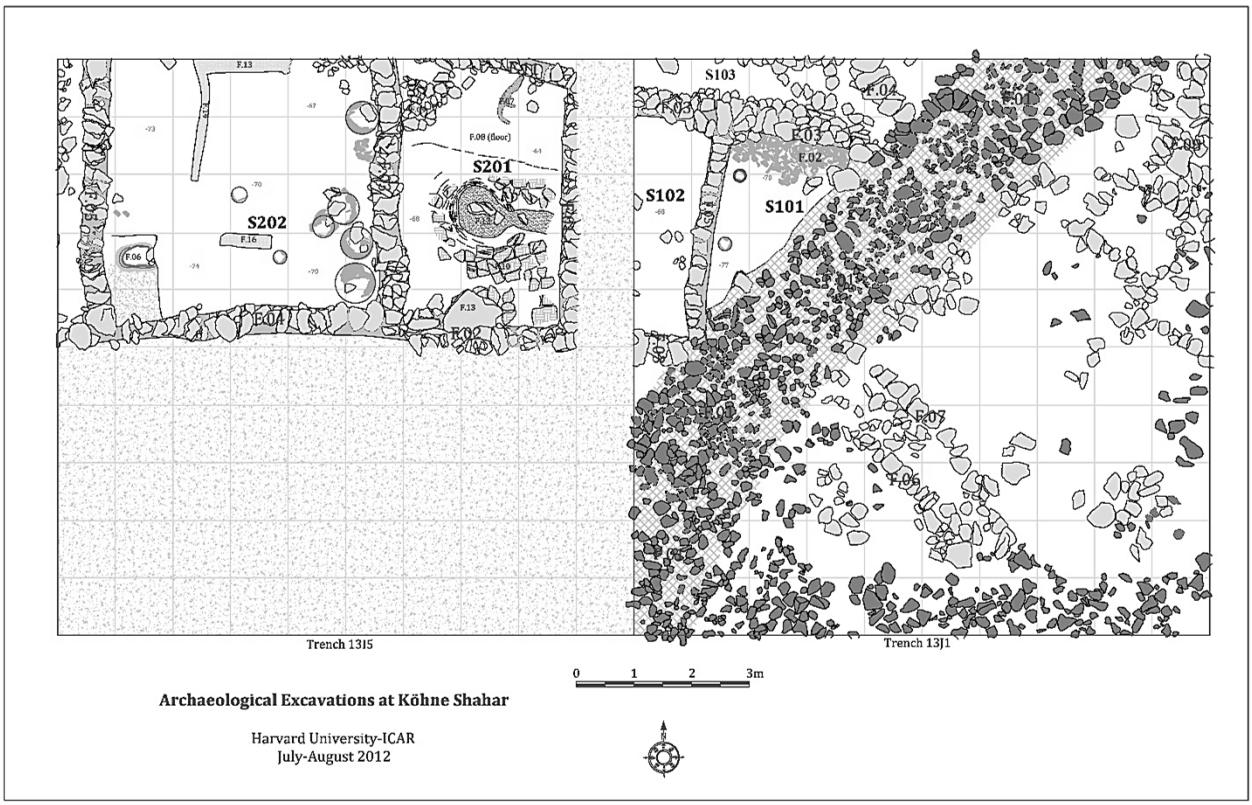

Fig. 23. Architectural remains, trenches 13J1 and 13I5

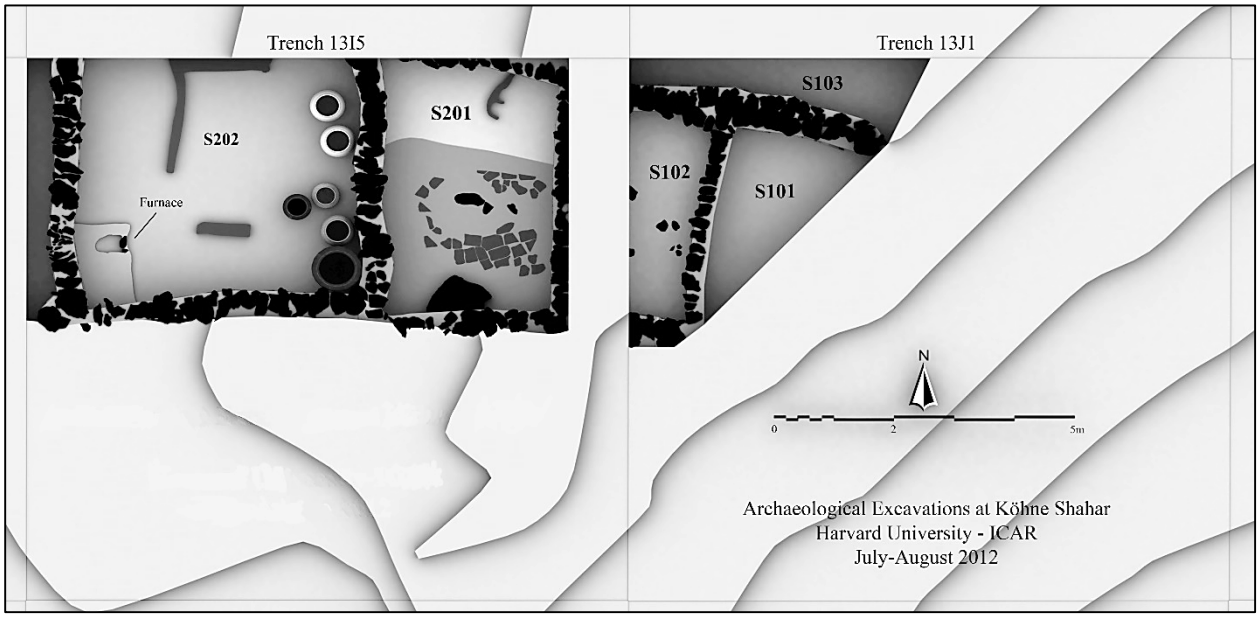

Fig. 24. Architectural remains, trenches 13J1 and 13I5 (by Hamed Eghbal)

Only a small portion of the trench 13J1 was excavated in its northwestern corner and this also represented NW corner of a rectangular architectural space, S101. The walls of S101 are made of pebble stones. On the interior surface of its western wall (F05), there were remnants of a thick (2-3cm) mud plaster. Archaeological deposits within this structure represented two phases; 1) the upper phase represented by concentrations of ceramic shards (Fig. 25) and associated objects, 2) the lower phase represented by a 25-35cm thick deposit of black and homogeneous ashy layer with some ceramic vessels and objects (Fig. 26). The ashy layer sits on top of a compressed surface, which served as the structure's occupational floor. We also recovered several mud bricks on the floor, which were baked due to exposure to high temperatures. This suggests that the remnants of the stone walls probably represent the lower portion of walls and upper parts of walls could have been made of mud-bricks. The thick ash deposits indicate the long-term and continuous nature of activities undertaken somewhere nearby and this room was used as a space for discarding.

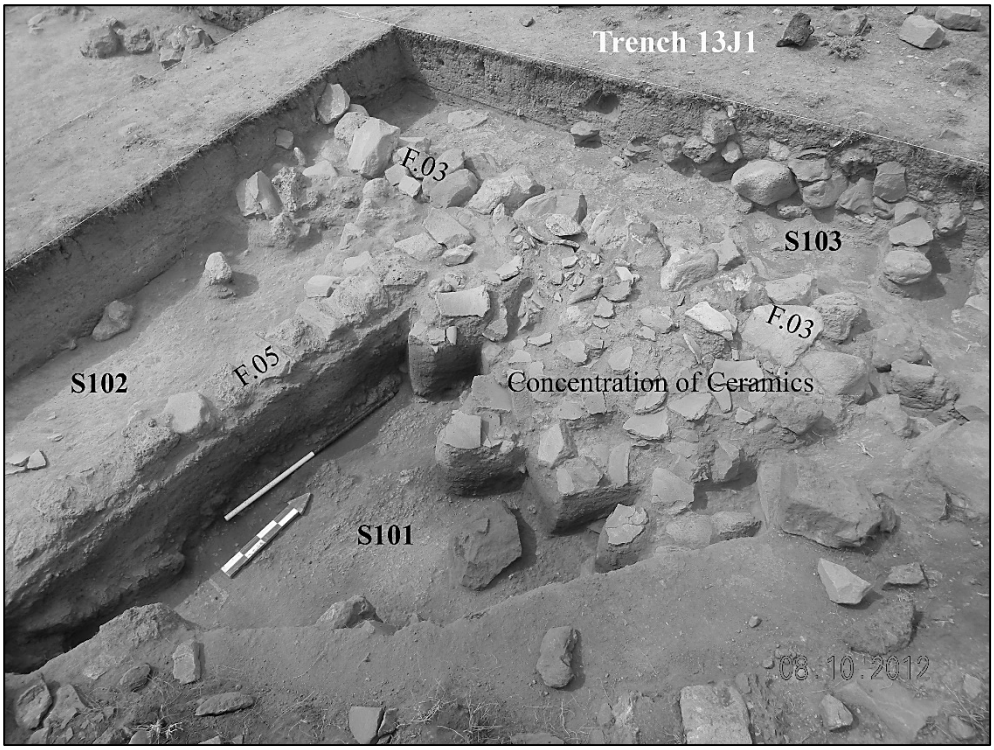

Fig. 25. Structure 101 and 102, Trench 13J1

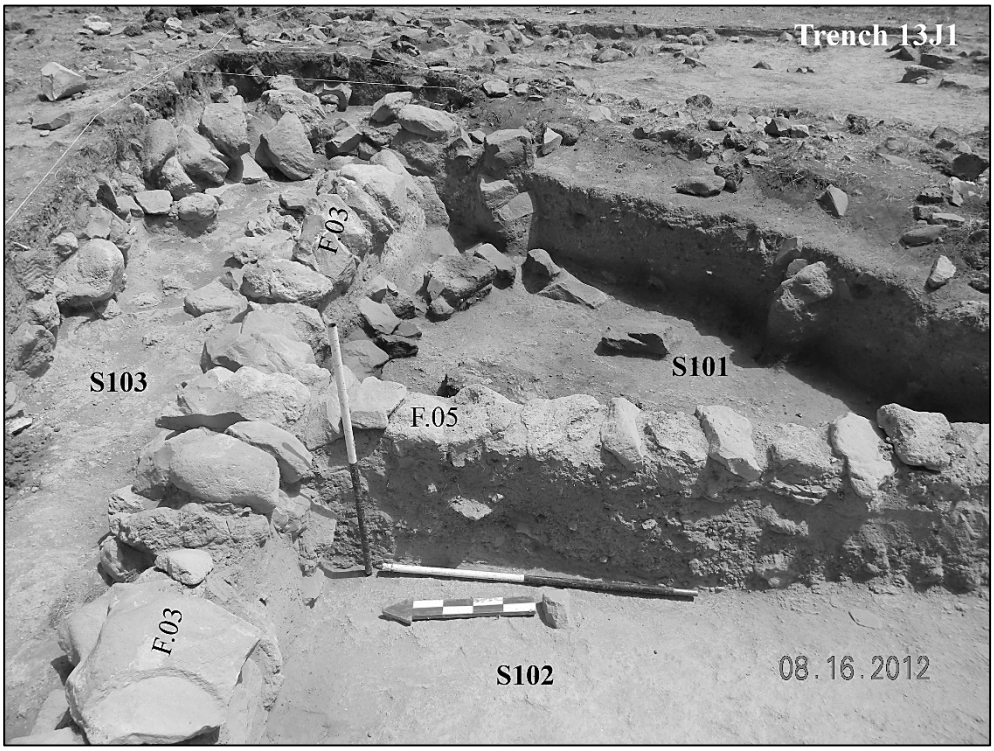

Fig. 26. Structure 101 and 102, Trench 13J1

Several slag fragments were also found within the thick ashy layer in S101 (see i.e. Fig. 27: 1-2). Other slag fragments were also recovered in S103, to the north of S101. The processes (smelting slags or crucible slags) in which these slags were produced remain unknown. Their glassy and porous nature[23] and their contextual association with ceramic crucibles suggest that they are crucible slags. The ashy deposits contained several vessels (Fig. 27: 3-5), the very small sizes of which is suggestive of their use as smelting devices. The aforementioned slags and possible ceramic crucibles require further detailed analyses for the verification of our hypothesis. However, parallels of similar small vessels have been recorded in metallurgical workshops at many sites.[24] It should also be noted that in the second season of excavations we recovered fragments of drilled and notched stone hammers that are considered mining tools. These tools were recovered from occupational phase 5 in trenches 13I5 and 12I8.[25]

Other materials from S101 include at least ten small clay objects that most likely represent plain clay tokens (Fig. 28: 1-4). I do not yet know whether these tokens bear a numeric value, or if they are associated with a particular type of commodity. In addition, we recovered at least nine stone beads, stone tools, a few small clay figurines, and a stamp seal (Fig. 28: 5). In terms of shape and design a parallel to this stamp seal can be found at Talin, a Kura-Araxes cemetery in Armenia (Badalyan and Avetisyan 2007: 247, Pl.III: 12). It should be noted that the stamp seal was found to the north of S101 in S103, but in a very similar ashy context and same phase. Ceramics found within S101 are all typical of Kura-Araxes material culture (Figs. 29-30).

[23] See Hauptmann 2007: 157.
[24] See i.e. Evely *et al.* 2012; Meanwell *et al.* 2013; also see Davey 1985.
[25] Hauptmann 2007: 137-138, Fig. 5.41.

The Ceramic assemblage includes both shard fragments and complete vessels with various types of Kura-Araxes decorations.

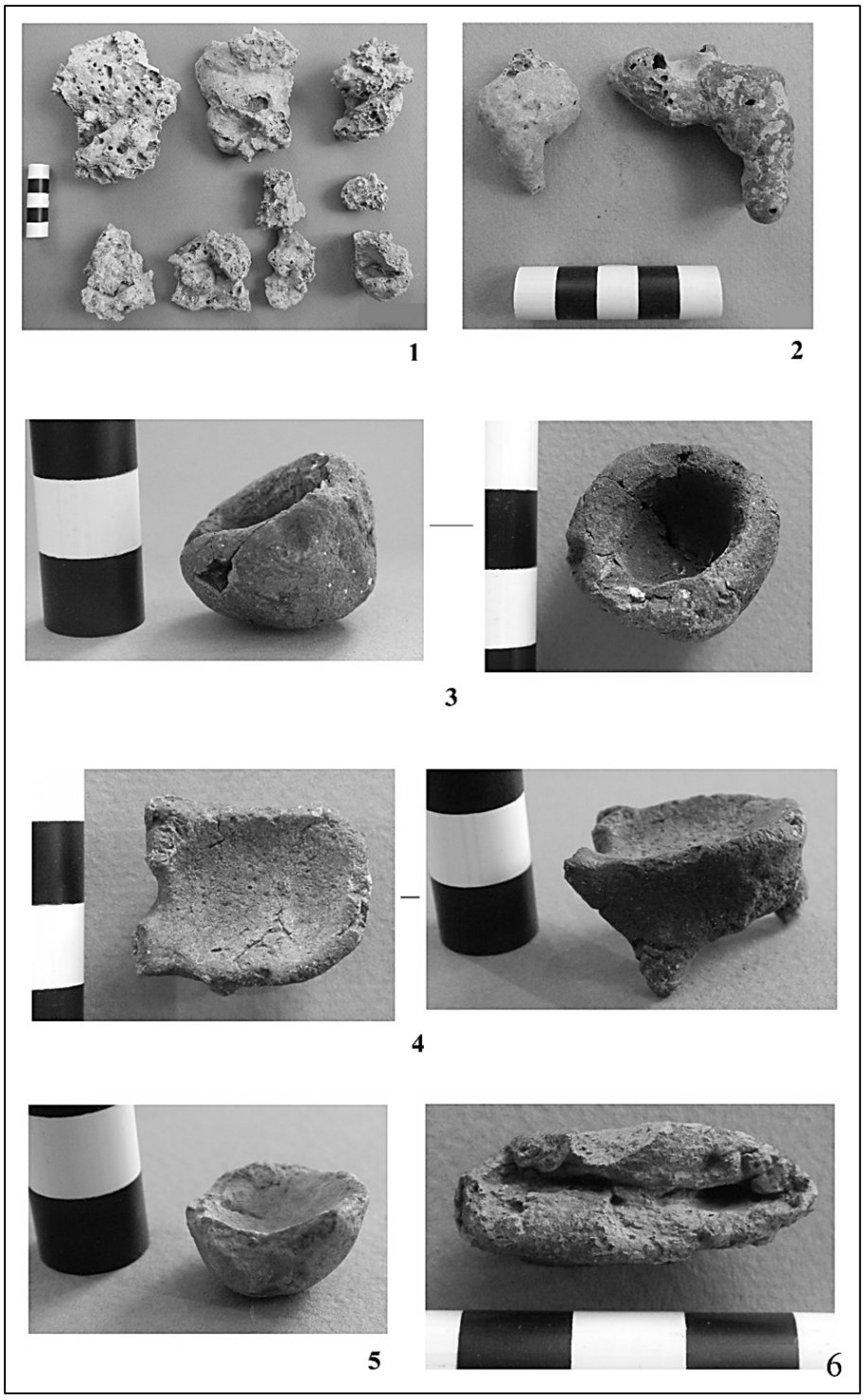

Fig. 27. Some Small Findings from Structure 101, Trench 13J1

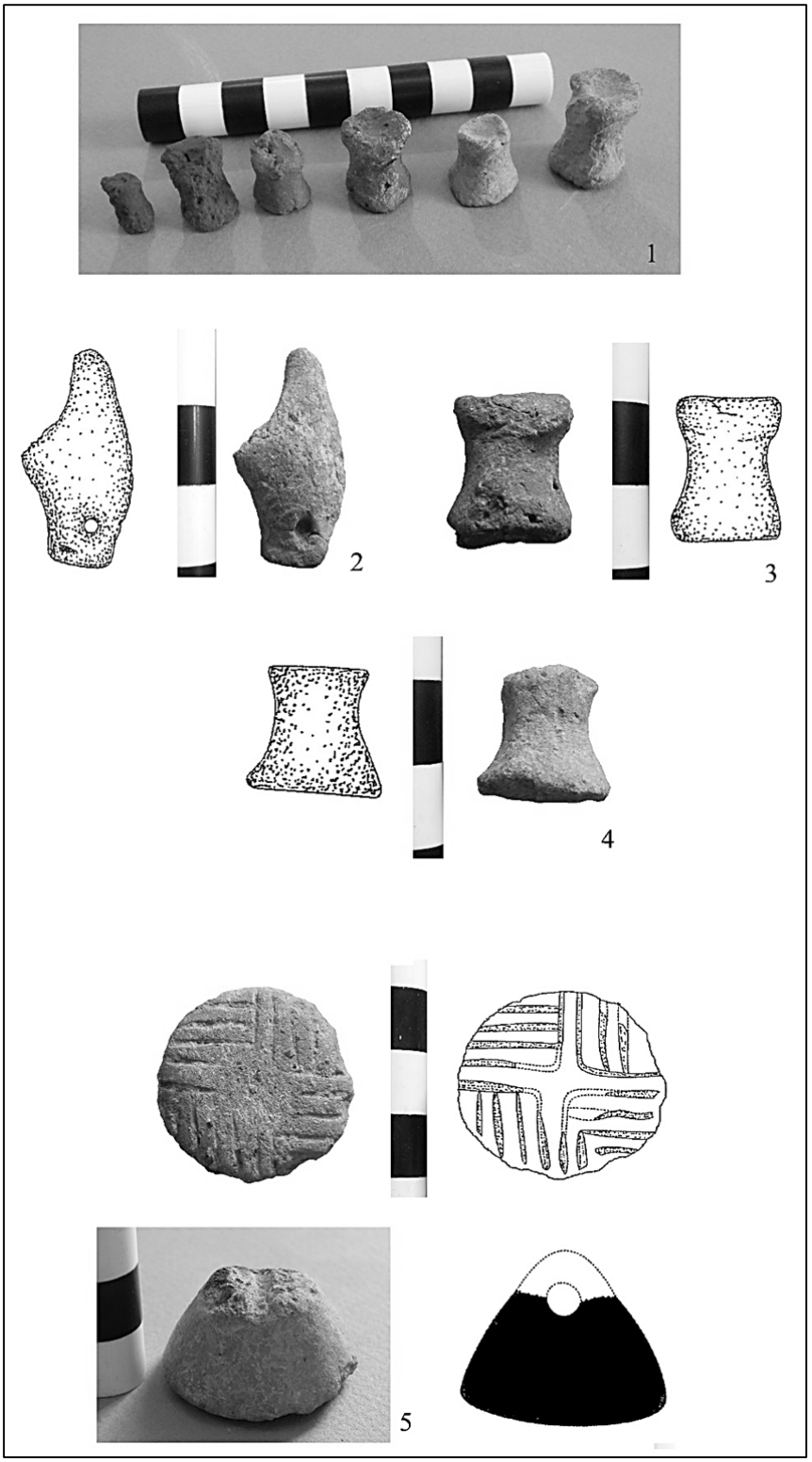

Fig. 28. Some small findings from trench 13J1

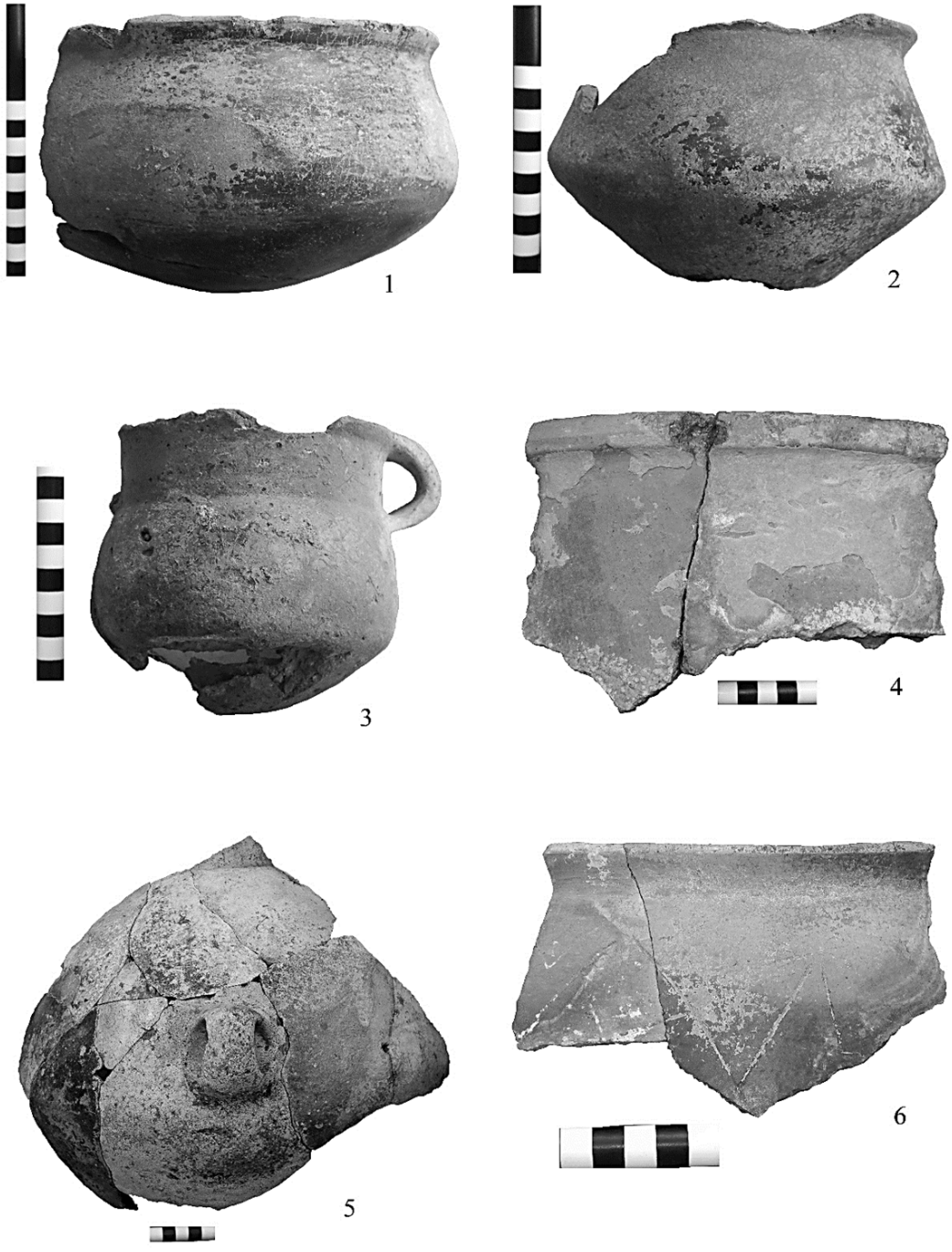

Fig. 29. Ceramics from Trench 13J1

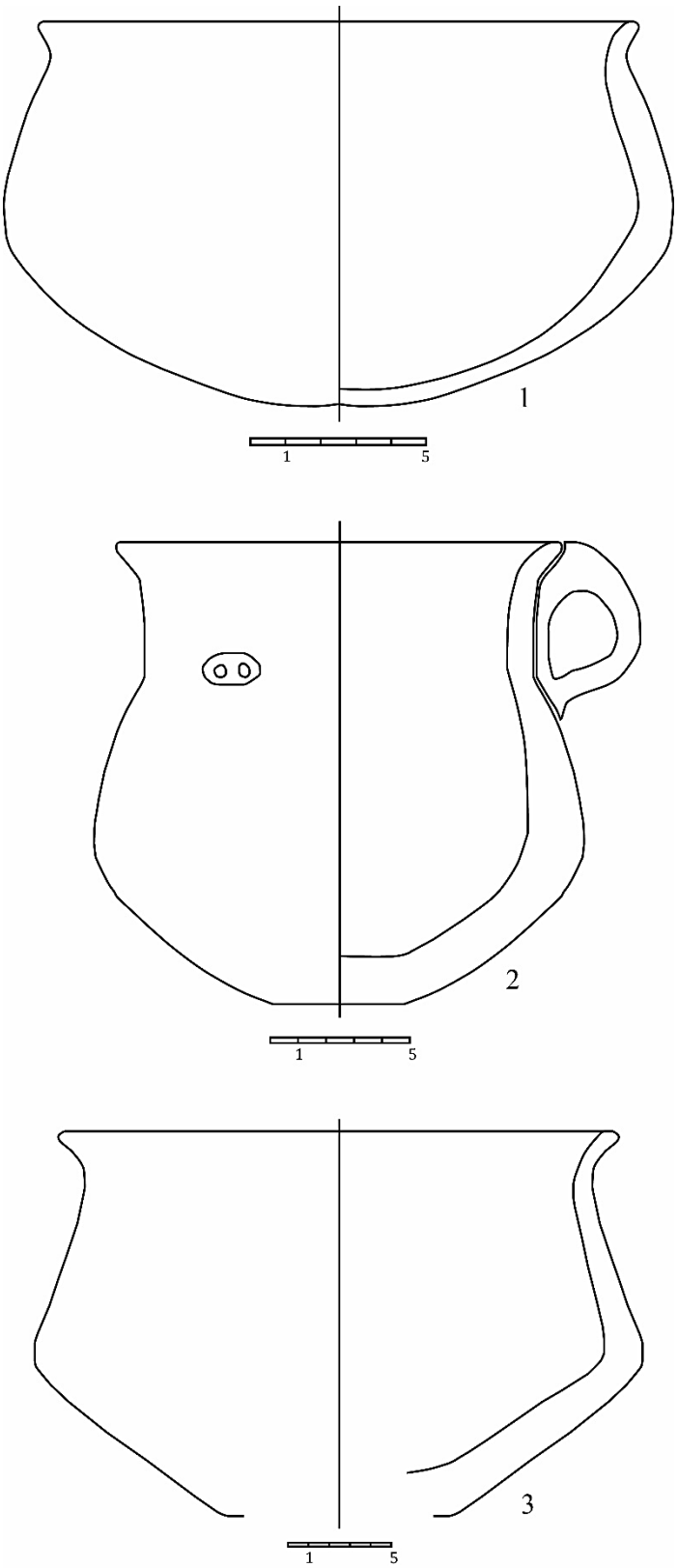

Fig. 30. Ceramics from Trench 13J1

Overall, these findings suggest that this structure was used as a space where rubbish was discarded. However, these discarded materials are a good source of information related to manufacturing process. Although we have not found any furnace, raw materials, ores, pigments, or finished goods, the existing evidence associated with S101 points to production debris, and suggests that this structure was locus closely related to manufacturing activities. I assume that this debris point to activities conducted lying beyond our excavation's boundaries in unexcavated rooms and spaces.

Structure 102 (13J1): this structure is located immediately to the west of S101, with which it shares a narrow wall, F.05 (Figs. 25-26). Only the eastern half of S102 was uncovered. Its western half remains unexcavated under a one-meter wide bulk between trenches 13J1 and 13I5. However, its western wall was detected on the eastern section of 13I5. Although its northern and southern walls were not fully uncovered, I estimate that the room was 2x6m in dimension. Compared to the S101, recovered materials associated with this structure are not considerable in number.

Structure 201 (13I5): this fully excavated building makes up the NE quarter of the trench 13I5 (Figs. 23-24). The bases of the walls are mostly made of pebbles, with the occasional large basaltic cobbles (Fig. 31). It is a rectangular space, 2.6x4.1m in dimension. Two features characterize this structure: a bench-shaped stone block in the middle of the southern side of the room, and its mud-brick floor. There is evidence for at least two floor levels within this room, with the lowest one (main floor) paved by mud-bricks of various sizes. Mud-brick pavement of rooms is also documented in Proto-Elamite layers of Area C at metalworking site of Arismān in the Central Plateau of Iran (Chegini, et al. 2011).

The room also has a central depression filled with ashy deposits. Large stones were later used to flatten the floor in that area. The exact function of this depression remains unknown. Evidence associated with this structure does not help us much to speculate about the function of S201. However, based on some features such as the possible bench, and the mud-brick floor, I suggest that this was an architectural space of relatively high significance.

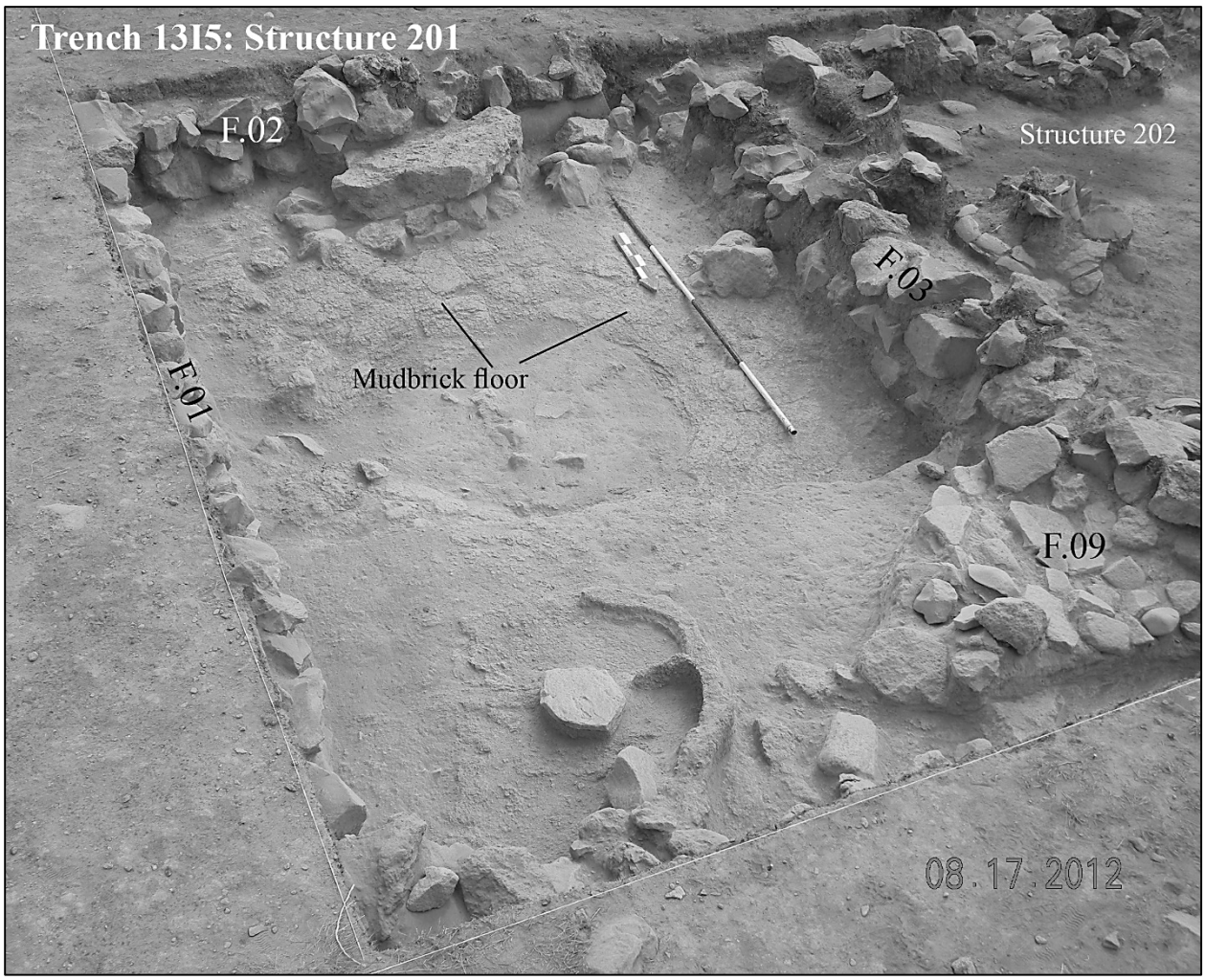

Fig. 31. Structure 201, trench 13I5

Ceramics recovered from S201 and their associated various decorations are typical of Kura-Araxes material culture (Fig. 32: 1-2, 4). There are also some a few types that differ from typical Kura-Araxes ceramics in paste color, surface treatment, and probably in manufacturing (Fig. 32: 3). For instance, there are ceramics with clay covering, a rare surface treatment in the Kura-Araxes tradition.

Other significant materials associated with S102 include a clay wheel (Fig. 33: 1), stone beads, a mace head fragment (Fig. 33: 2), an object similar to a clay cone (Fig. 33: 3), and a clay sealing (Fig. 33: 4-1 and 4-2) which is very similar to those found in period VIA of Arslantepe (Ferioli and Fiandra 1983: Fig.2). Clay sealings are known from many archaeological sites in the Near East from the mid-fourth millennium onward (Ferioli and Fiandra 1983). The impressions of string on the clay suggest its use in fastening sacks on a container. This is interesting because this sealing clay was found next to S202 in which we recovered five large storage jars. I assume that such sealing could have been used in fastening the sacks on these containers.

Excavations in S201 also yielded a small lithic assemblage. It is dominated by debitage, but also includes some tools. The material is mostly made of obsidian, but a small portion is also made of chert. The geochemical characteristics of the obsidian have not yet been analyzed. However, they range from opaque (grey, dark grey to black in color) to brown/black, usually with banded textures (see Alizadeh, et al. forthcoming).

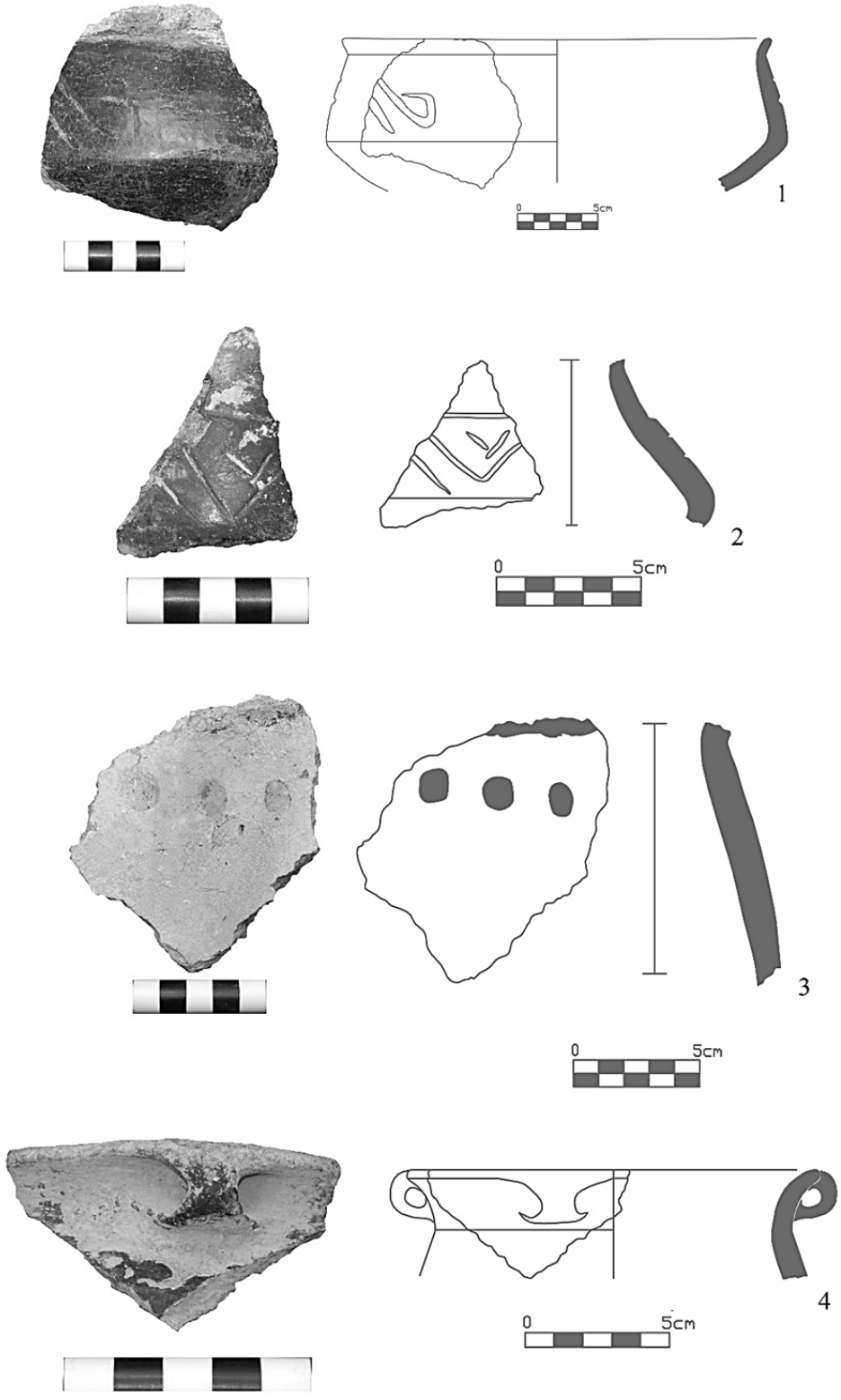

Fig. 32. Ceramics from S201, trench 13I5

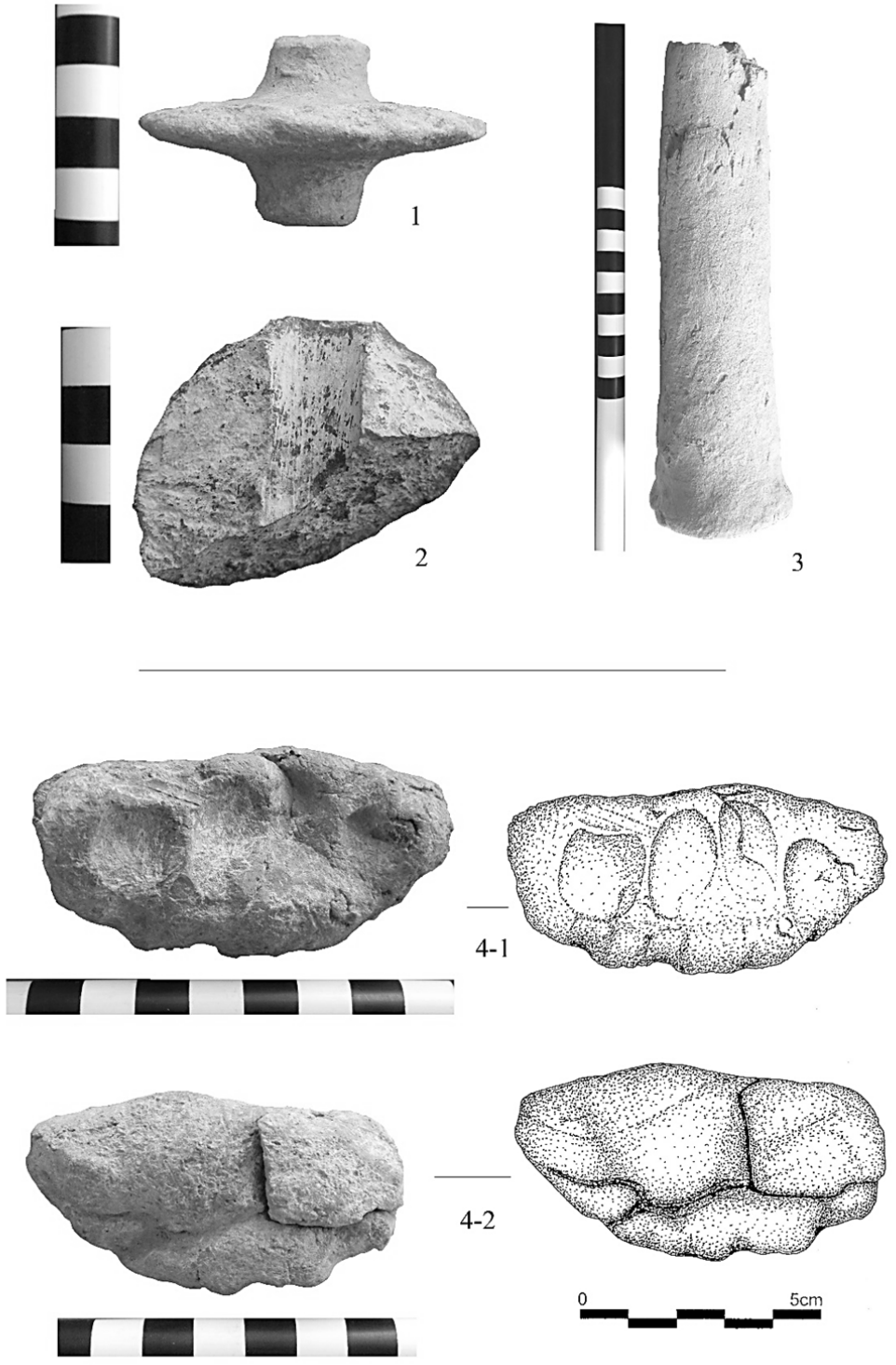

Fig. 33. Some objects from S201, trench 13I5

Structure 202 (trench 13I5): In trench 13I5, two structures, S201 and S202, were fully uncovered in 2012. These two trenches are separated by a one-meter baulk. Architectural features from both trenches are contextually related, and therefore in our discussion the material from both trenches will be treated together. Due to time constraints, I only concentrated on the northern half of the trench. The southern half of 13I5 was excavated in 2013 (Figs. 23-24 and 34-36). Overall, in trench 13I5 we uncovered five architectural spaces (S201, S202, S203, S204, and S205). Interesting is that southern side of S202 is not shared with S204 and walls of these two structures are parallels but not shared. A similar architectural layout is also seen at Karnut I in Armenia (Badalyan and Avetisyan 2007: 138, Pl.II). S202 contained the richest collection of recovered material. This structure exposed in the northwestern quarter of the trench 13I5 was mostly uncovered and represents the largest rectangular structure found so far. Although we could not detect the northern side of the structure, it seems that the room should have been at least 21m² in area. The structure was divided into a few parts by partitioning walls such as F.13, F.4 and F.16.

Along the eastern wall of S202 there were six large jars (five of which were mostly complete) placed on the floor or worked into the occupational floor (Fig. 36). The largest jar was carefully placed in the SE corner of the room. The gap between the jar and the corner of the room was filled with clay and small stones to support the jar in the back. Similar alignment of jars along walls is also documented at Karnut I in Armenia (Badalyan and Avetisyan 2007: 138, Pl. II). Given their large sizes, these jars were most likely used as storage vessels. In a similar archaeological context documented in the Nineveh V period at Tell al-Raqa'i in northern Mesopotamia, Schwartz (1994: 28) hypothesizes that storage facilities along with administrative

technologies are indicators of specialized activities by which elites of the society could collect agricultural "surpluses to support their dependent personnel."

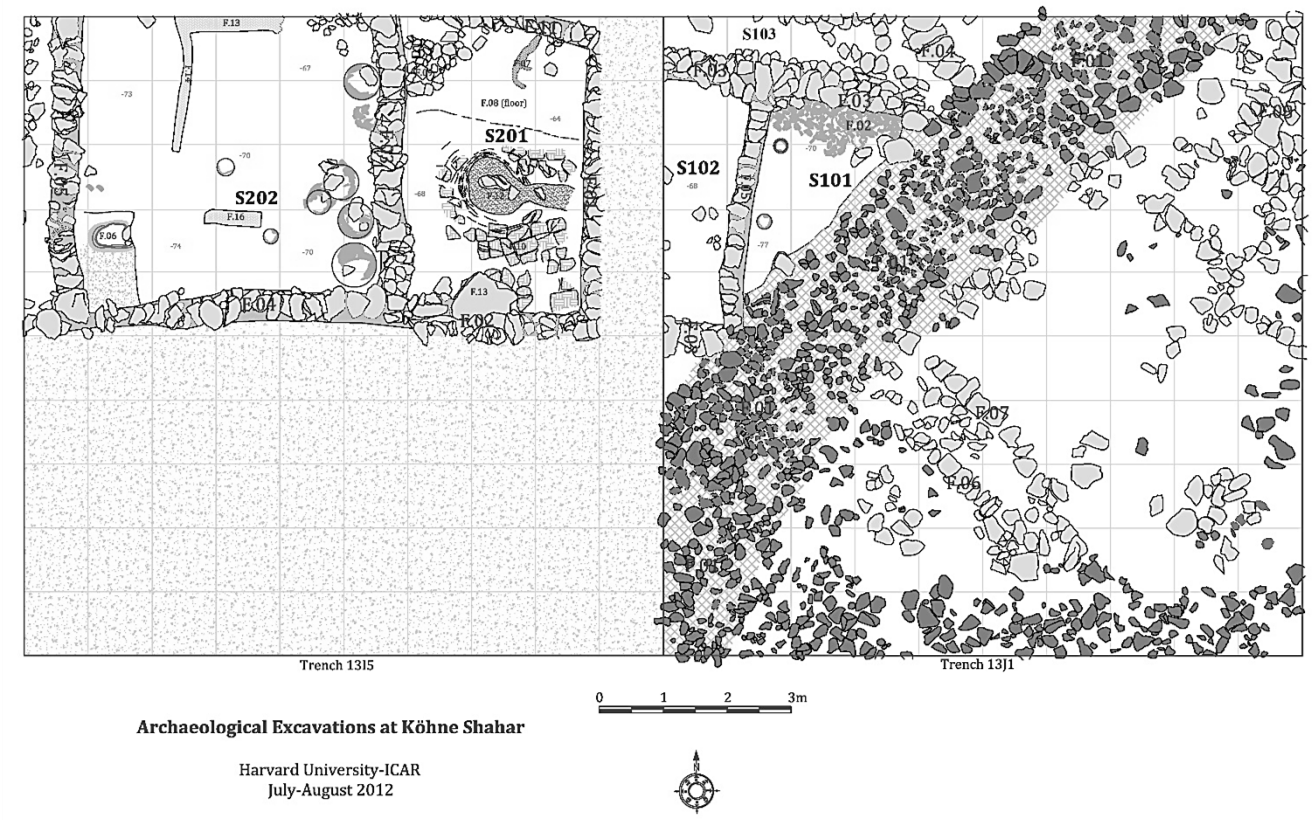

Fig. 34. Architectural remains, trenches 13J1 and 13I5

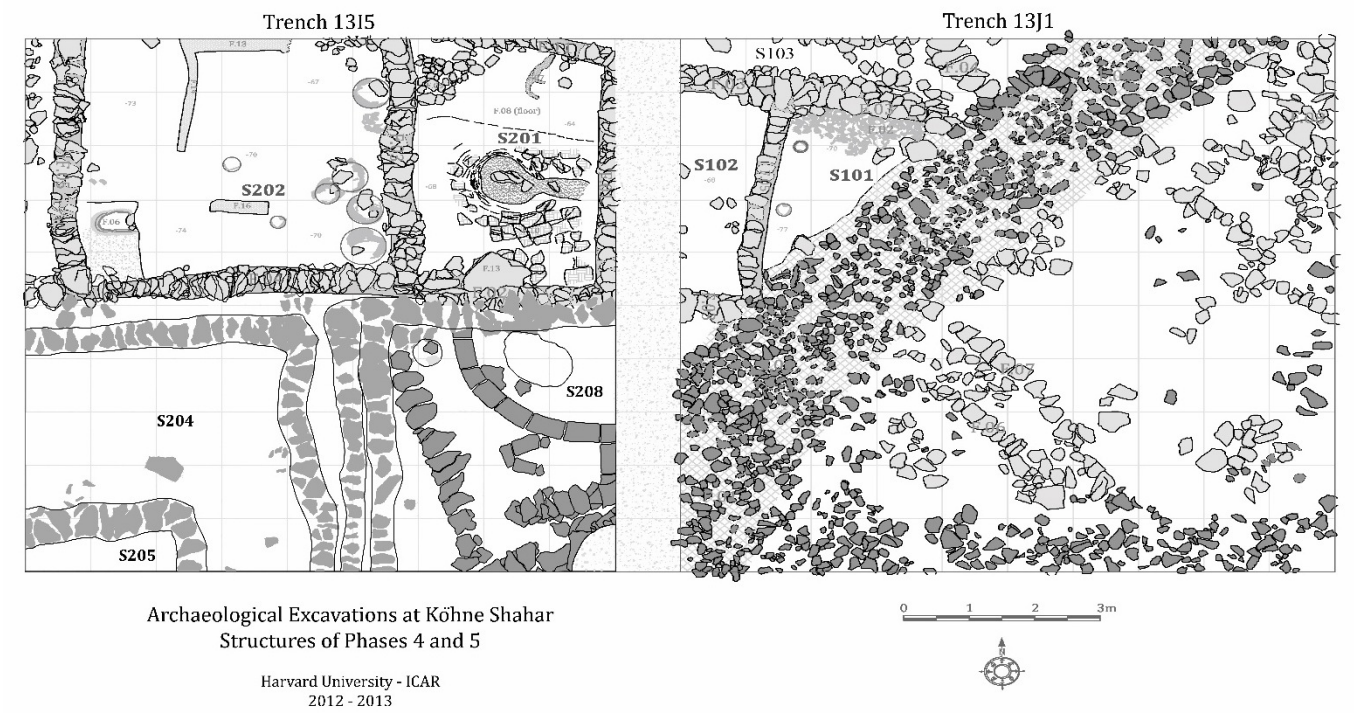

Fig. 35. Architectural remains, trenches 13J1 and 13I5

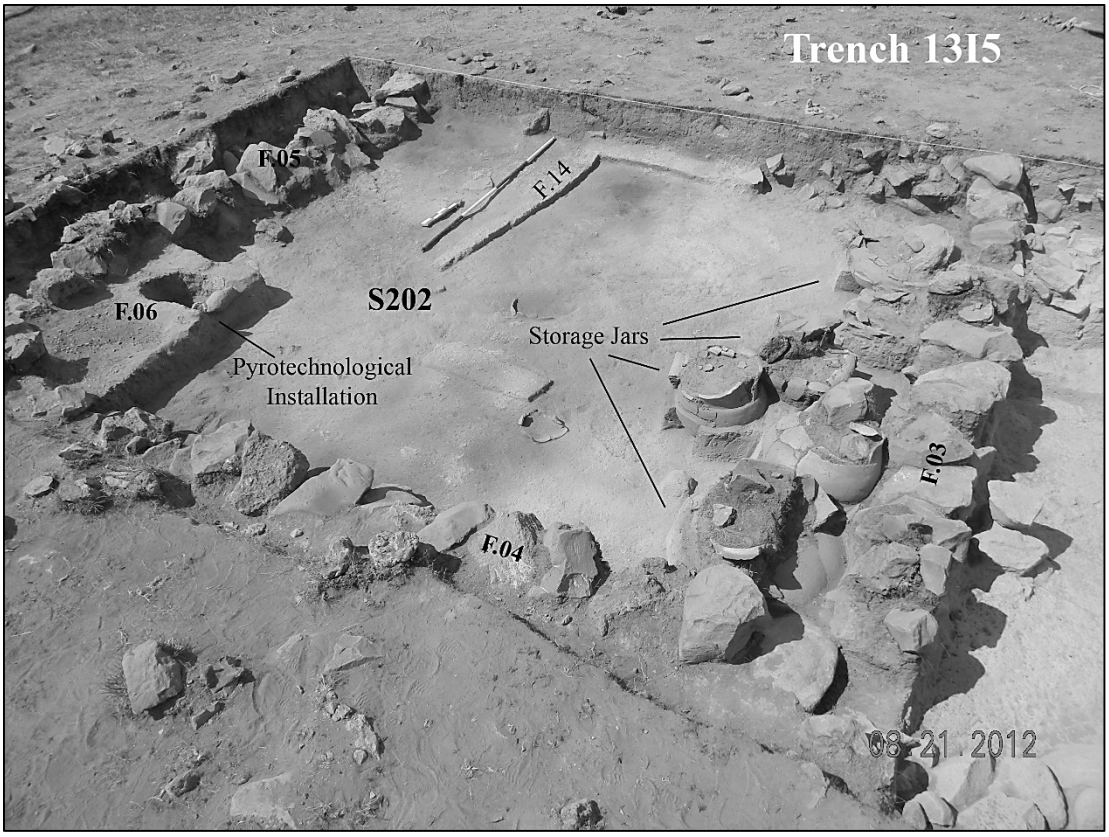

Fig. 36. Structure 202, trench 13I5

The role of storage in both the subsistence and the political economy is very important. T. D'Altroy and T. Earle (1985: 190-191) argue that in subsistence economy the storage is used as a mechanism to average "fluctuations in the availability of a material over time" and also "to average annual variation in food production that unpredictability affects total yearly harvest of food." Storage is therefore crucial to successful management, because institutions such as "governmental bureaucracies, the military, and religious hierarchies, require a constant and reliable supply of materials" when they are supplied by staple products (D'Altroy and Earle 1985: 191).

The other significant feature associated with S202 was a pyrotechnological installation (F.06) in the very SW corner of the room (Fig. 23-24, 34-37). It was built about 30 cm above the floor of the room and was surrounded by heated orange sediments, and small stones and gravels. It includes an oval-shaped channel or "ash box" with a depth of around 30 cm, and a multi-layer plastered wall. There was also a stone blocking the mouth of the channel. Archaeological deposits within S202 were mostly ashy but not as homogenous as those in S101. It is highly likely that this structure was also a workshop unit, representing a multi-functional structure.

In addition to the six large storage jars along the eastern wall (Fig. 38), the rest of the ceramic assemblage within S202 point also to the Kura-Araxes culture (Fig. 39). However, similar to S201, S202 also contained ceramics that differed from typical Kura-Araxes ceramics in paste color, surface treatments, and probably in manufacture (Fig. 39:5). Other materials associated with S202 include a small ceramic container similar to crucibles (Fig. 40:1), stone objects (Fig. 40: 2-3), stone beads (Fig. 40:4), bone objects, a plain clay token (Fig. 40:5), and small quantities of knapped debitage and tools. In general, the stone tool collection is small and

poor. There is some chert, but tools are mostly made on obsidian, the physical characteristics of which resemble those of S201.

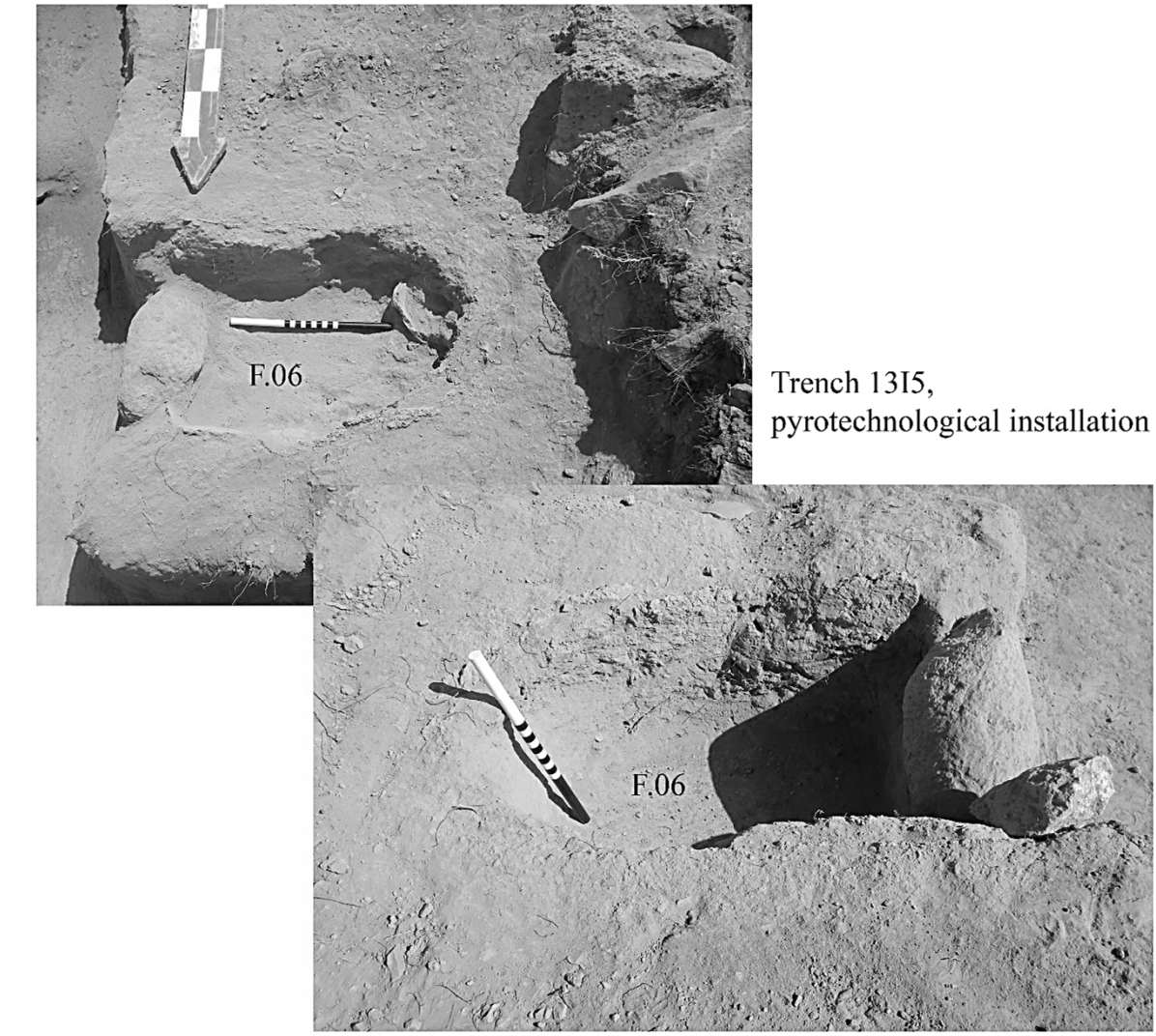

Fig. 37. Furnace (F.06) in SW corner of structure 202, trench 13I5

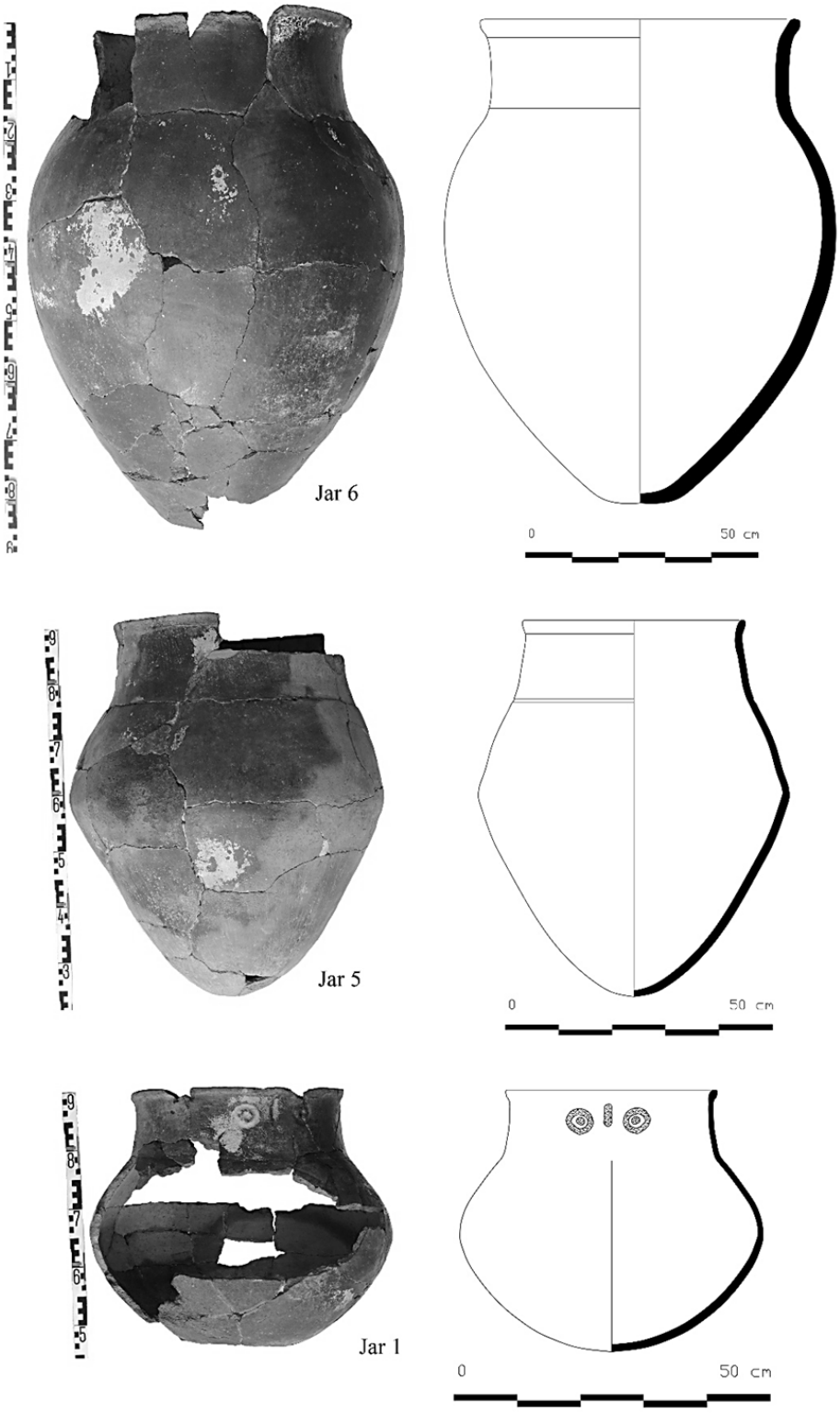

Fig. 38. Three of Storage Jars from Structure 202, Trench 13I5

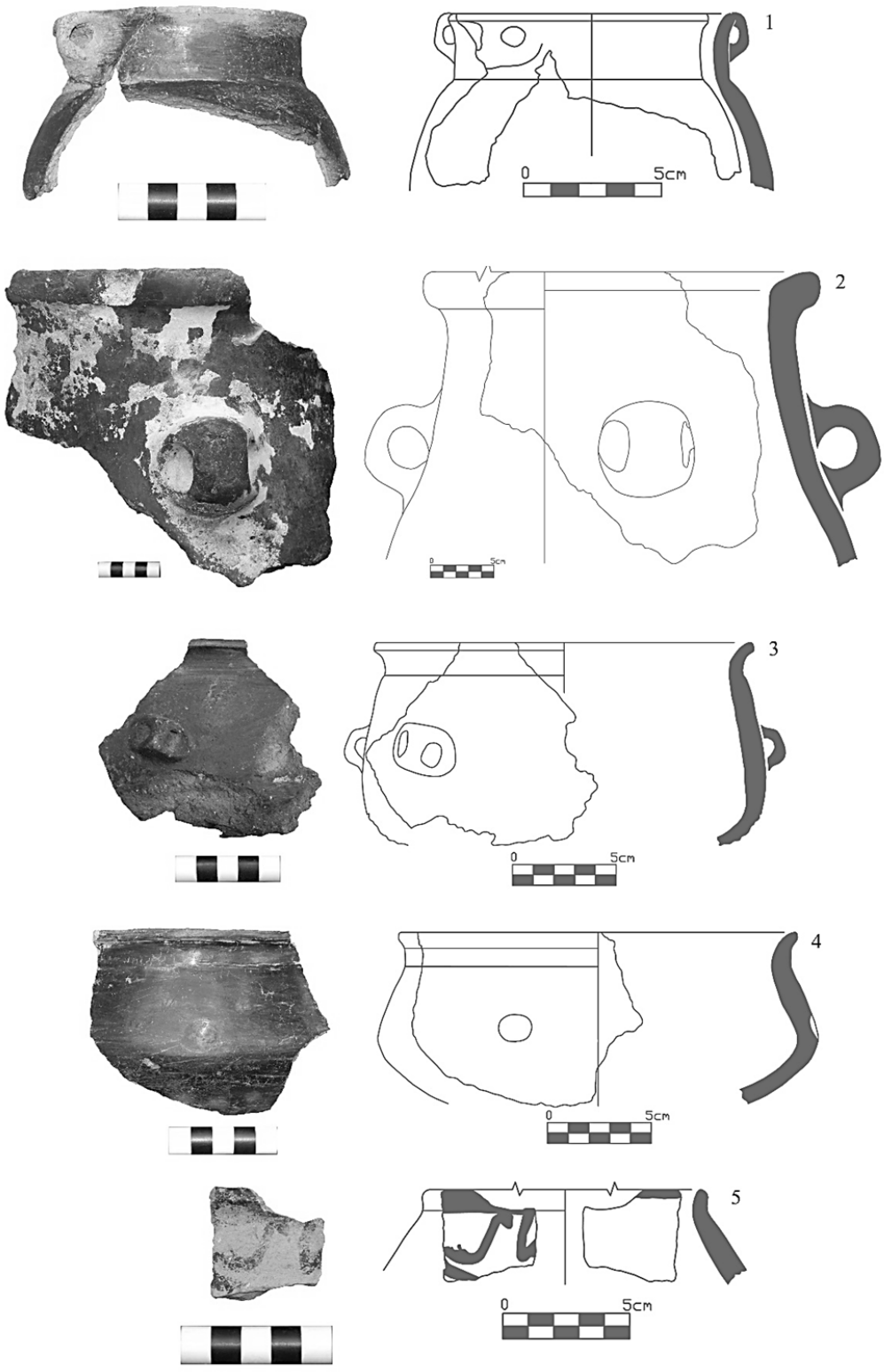

Fig. 39. Ceramics from Structure 202, trench 13I5

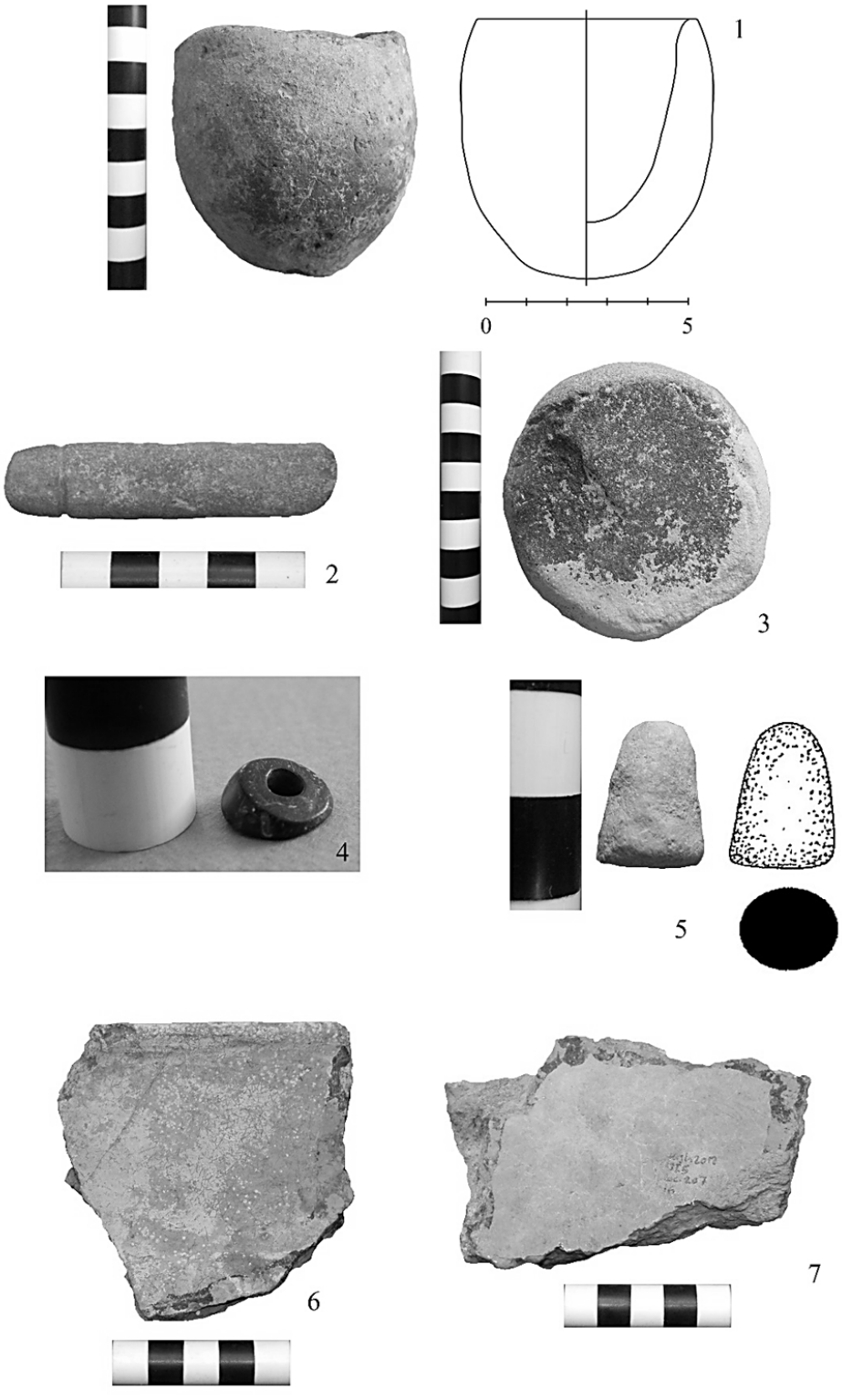

Fig. 40. Objects and ceramics from Structure 202, trench 13I5

Structure 306 (12I8): In addition to the completion of excavations in trench 13I5, I opened trench 12I8 on the northern edge of the central plaza (Fig. 8-9), a neighborhood to the north of the central plaza. Five architectural spaces, 0S301, S302, S303, S304, and S306 were uncovered (Fig. 41). Among them structure 306 (S306) provided materials very similar to what we saw in S101 in trench 13J1 (Figs. 42 and 43). This structure is located between two circular structures, S301 and S303 to the north-western portion of the trench. Careful analysis of relationship between S306 and others in the trench suggest that the construction of S306 preceded the construction of other buildings. However, walls of S306 were integrated into other structures suggesting that it was in use even after construction of newer buildings such as S301, S302, and S303.

We uncovered only a small portion of S306 and the rest of the structure goes beyond our trench to the north. However other associated materials and objects within a small area of the structure may allow us to have some speculations about the function of the space. In the lower layers, we found a 30cm thick deposit of black and homogeneous ashy layer with some ceramic vessels, slags, some objects, animal bones, and one possible human bone. Generally the admixture of deposits and associated materials in S306 seem very similar to S101.

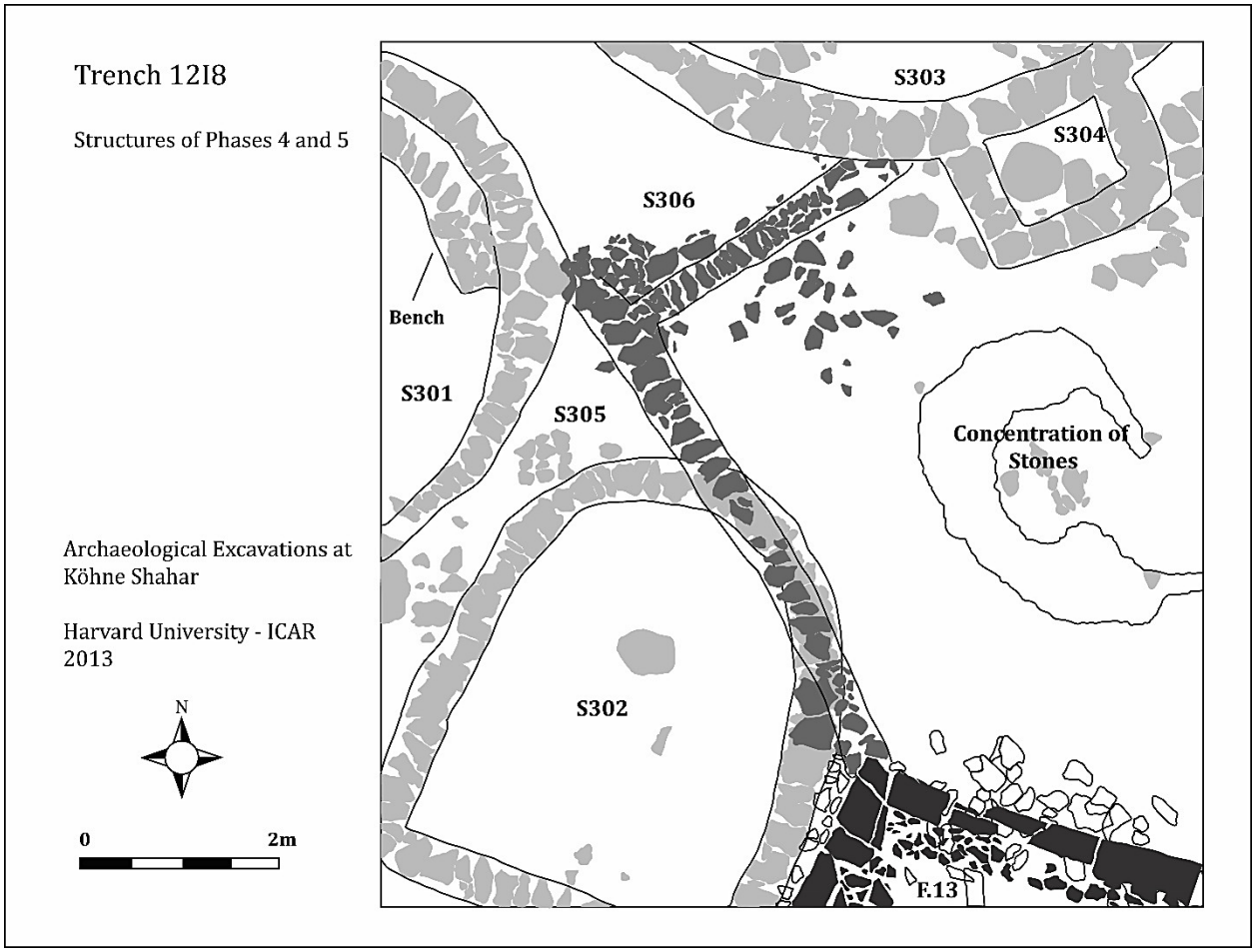

Fig. 41. Architectural remains, trench 12I8

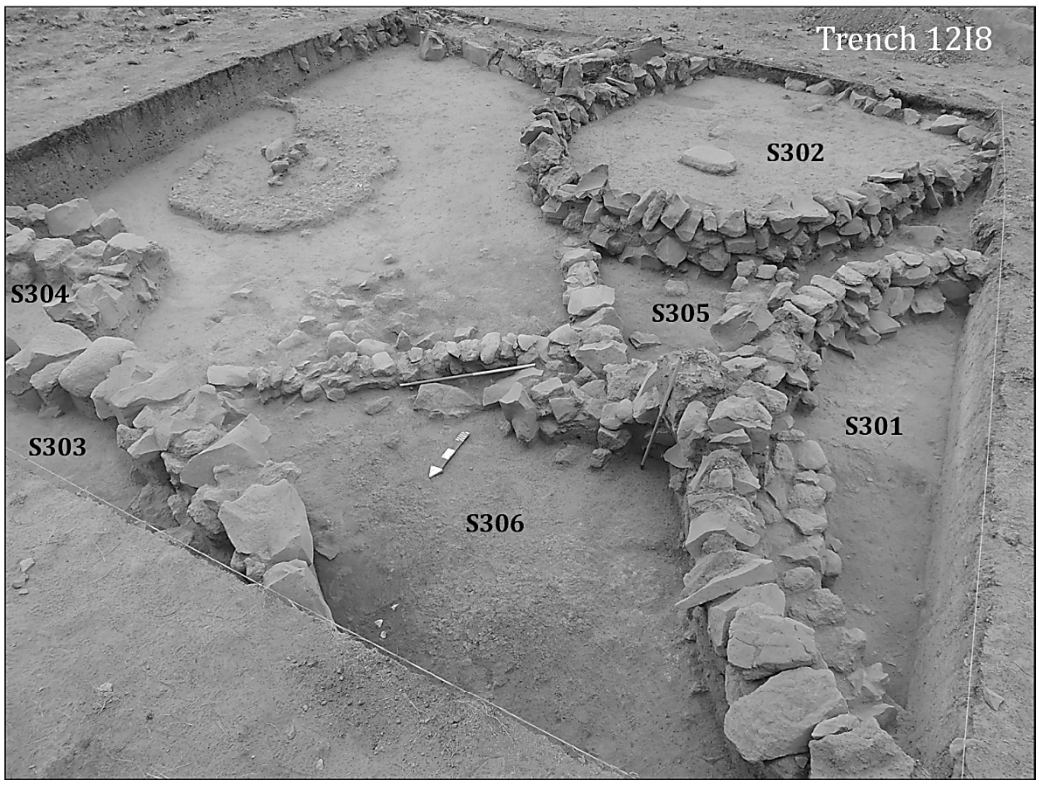

Fig. 42. Architectural remains, trench 12I8

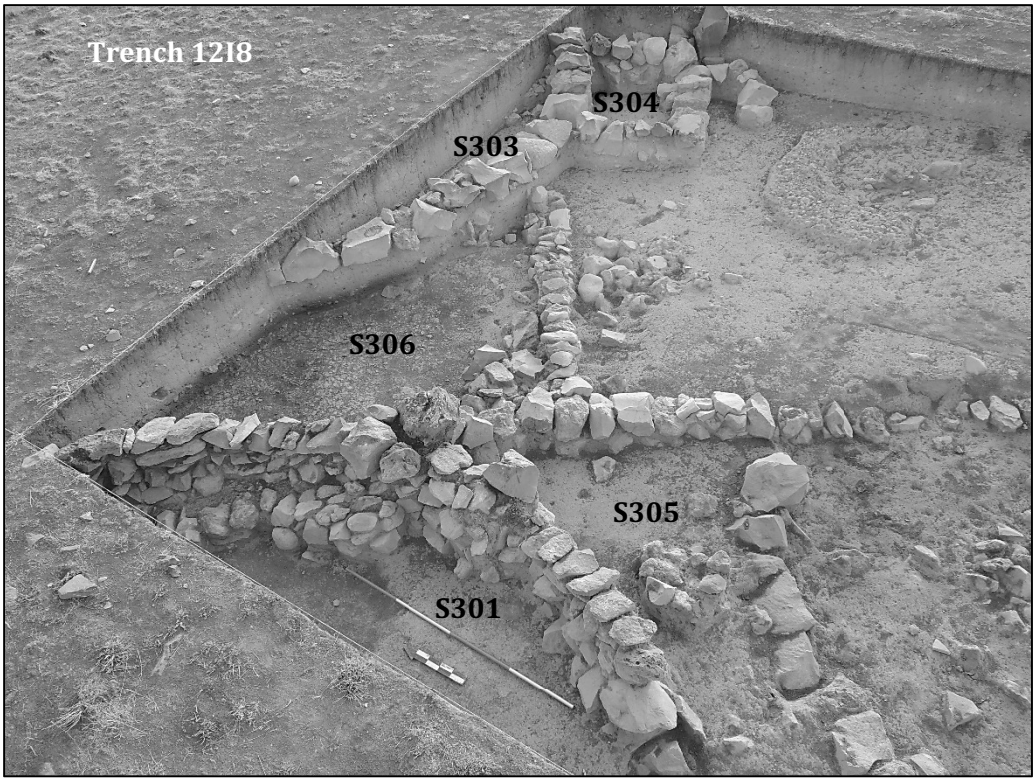

Fig. 43. Architectural remains, trench 12I8

The ashy layer sits on top of a compressed surface, which served as the structure's occupational floor. We also recovered several mud bricks on the floor, which were baked due to exposure to high temperatures. The thick ashy deposits indicate the long-term and continuous nature of activities undertaken within the room. Many slag fragments were also found within the thick ashy layer in S306 (see i.e. Fig. 44: 1). Other materials from S306 include a small obsidian arrow-head (Fig. 44: 3) and some obsidian debitage, a bone tool (Fig. 44: 2), an animal skull which most likely is a dog (Fig. 44: 4), several ceramic vessels especially a jar with three handles (Fig. 45). Within this jar were uncovered dozens of cereal seeds. These seeds are to be analyzed.

Figure 44. Some of findings from S306 in trench 12I8

Fig. 45. A three-handle jar from S306 in trench 12I8

Ceramics found within S306 are all typical of Kura-Araxes material culture (see Figs. 46-48), although we also uncovered some other ceramics that differed from typical Kura-Araxes ceramics in paste color, surface treatments, and probably in manufacture (i.e. Fig. 46: 1). The Ceramic assemblage includes both shard fragments and complete vessels with various types of Kura-Araxes decorations. Overall, recovered materials suggest that this structure was used as a

space where rubbish was discarded. The existing evidence especially the thick ashy deposits and many slag fragments associated with S306 point to production debris, and suggests that this structure was locus closely related to manufacturing activities. I assume that this debris point to activities conducted lying beyond our excavation's boundaries in unexcavated rooms and spaces.

Structure 401(12J21): In 2014 excavations, I opened three large trenches. Trench 12J21 was opened to the north of 13J1 in eastern neighborhood (Figs. 8-9). In this trench we uncovered a large circular architectural space, S401, almost in the middle of the trench surrounded by several other structures (Figs. 49-50). This is the largest of all rooms. Surrounding buildings were possibly attached to S401 but because they are not fully uncovered our assumption does not go beyond a mere speculation.

The circular building (S401) consist of a circular wall, an entrance, a partitioning wall in the middle from northeast to southwest, and two pyrotechnological installations in both sides of the partitioning wall to the north-east of the building. The circular building's diameter is 6.5m with an area about 31m² and walls preserved to about 70-75cm in height. The circumference wall is made of un-worked cobblestones, either basaltic or limestone. Mud-mortar was used among cobbles and there were remnants of a thick (2-3cm) mud plaster on the interior surface of the wall. The entrance to the southwest is about 2m in width. The wide entrance was featured mostly by two large boulders in both sides.

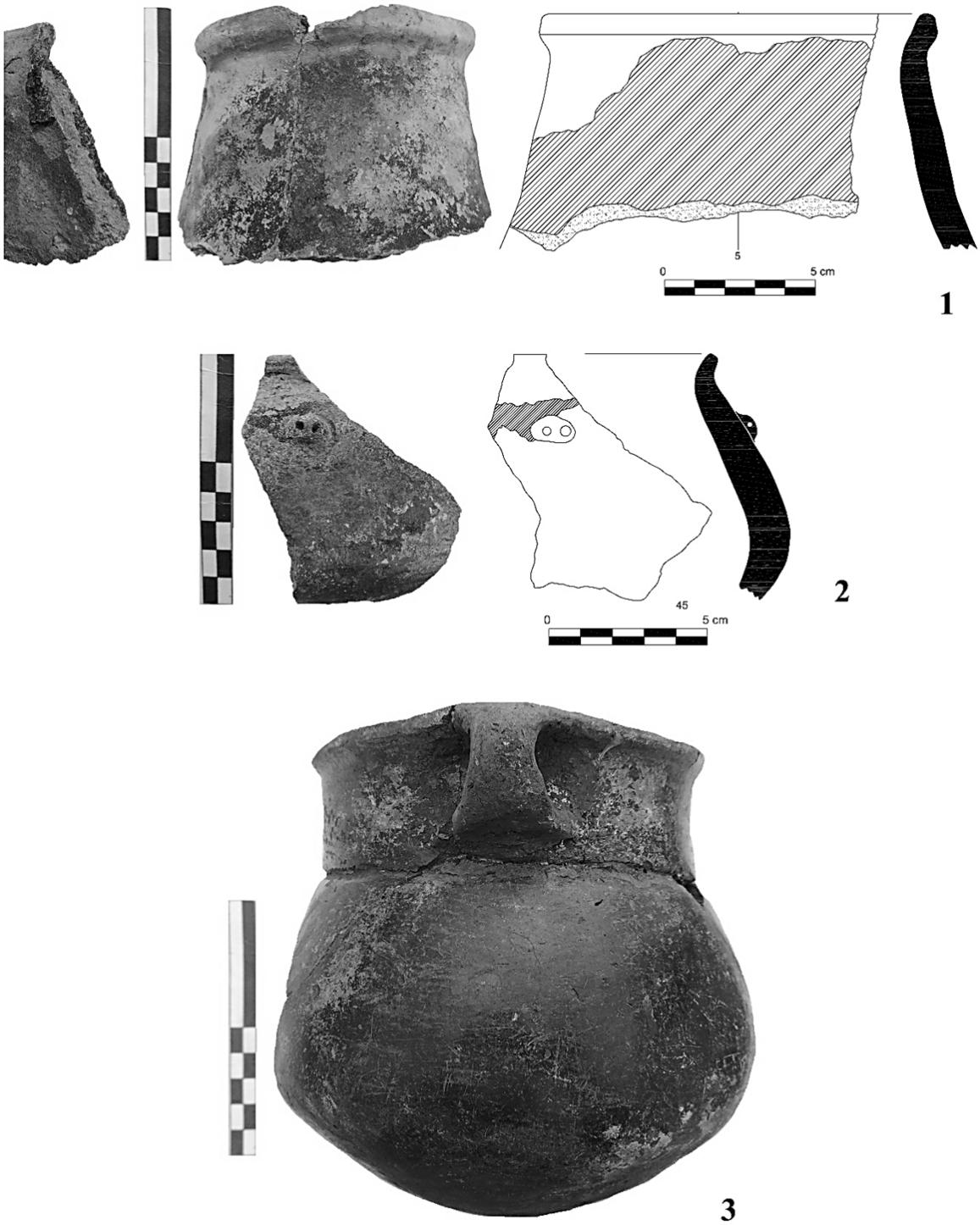

Fig. 46. Ceramics from S306 in trench 12I8

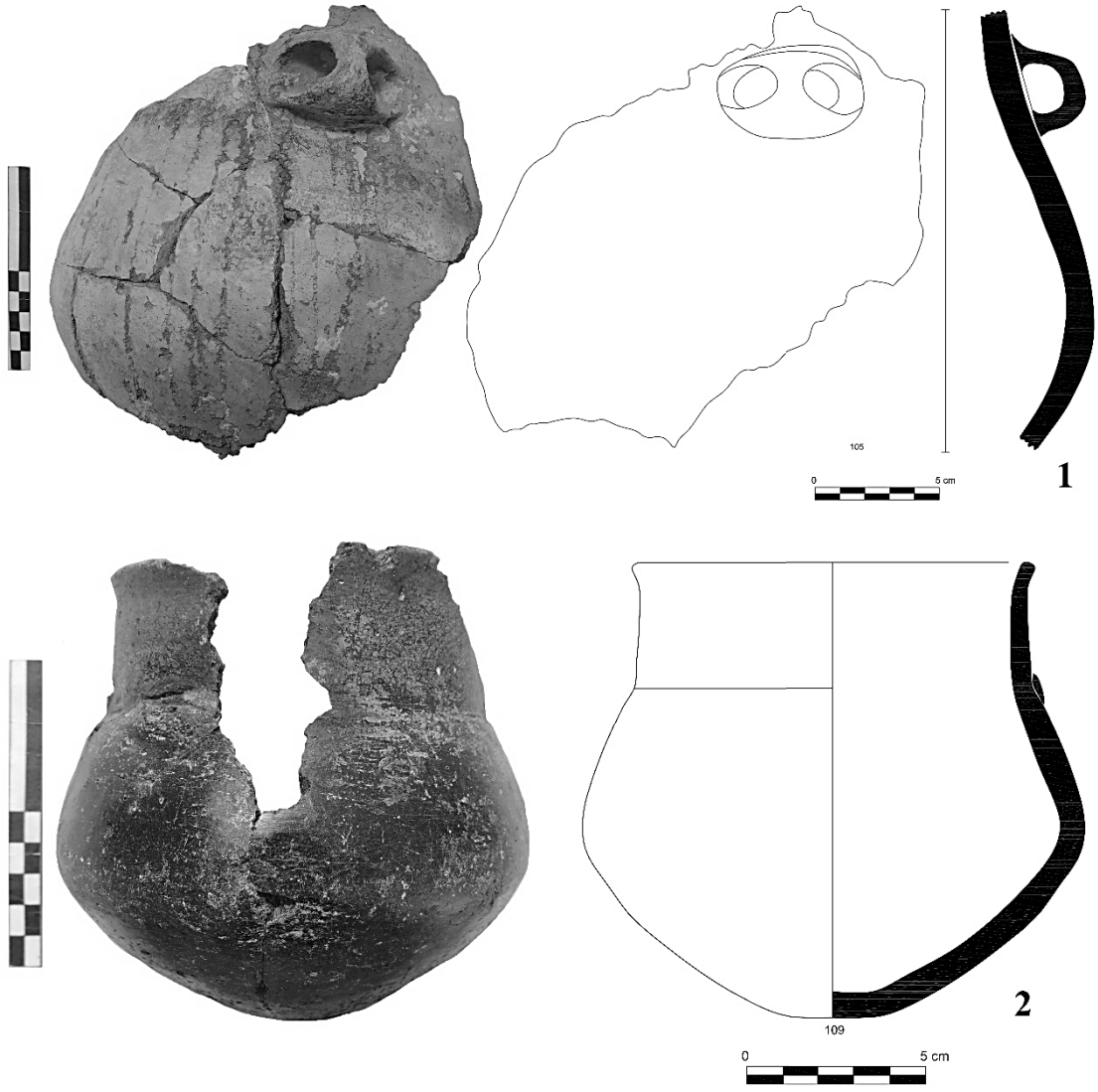

Fig. 47. Ceramics from S306 in trench 12I8

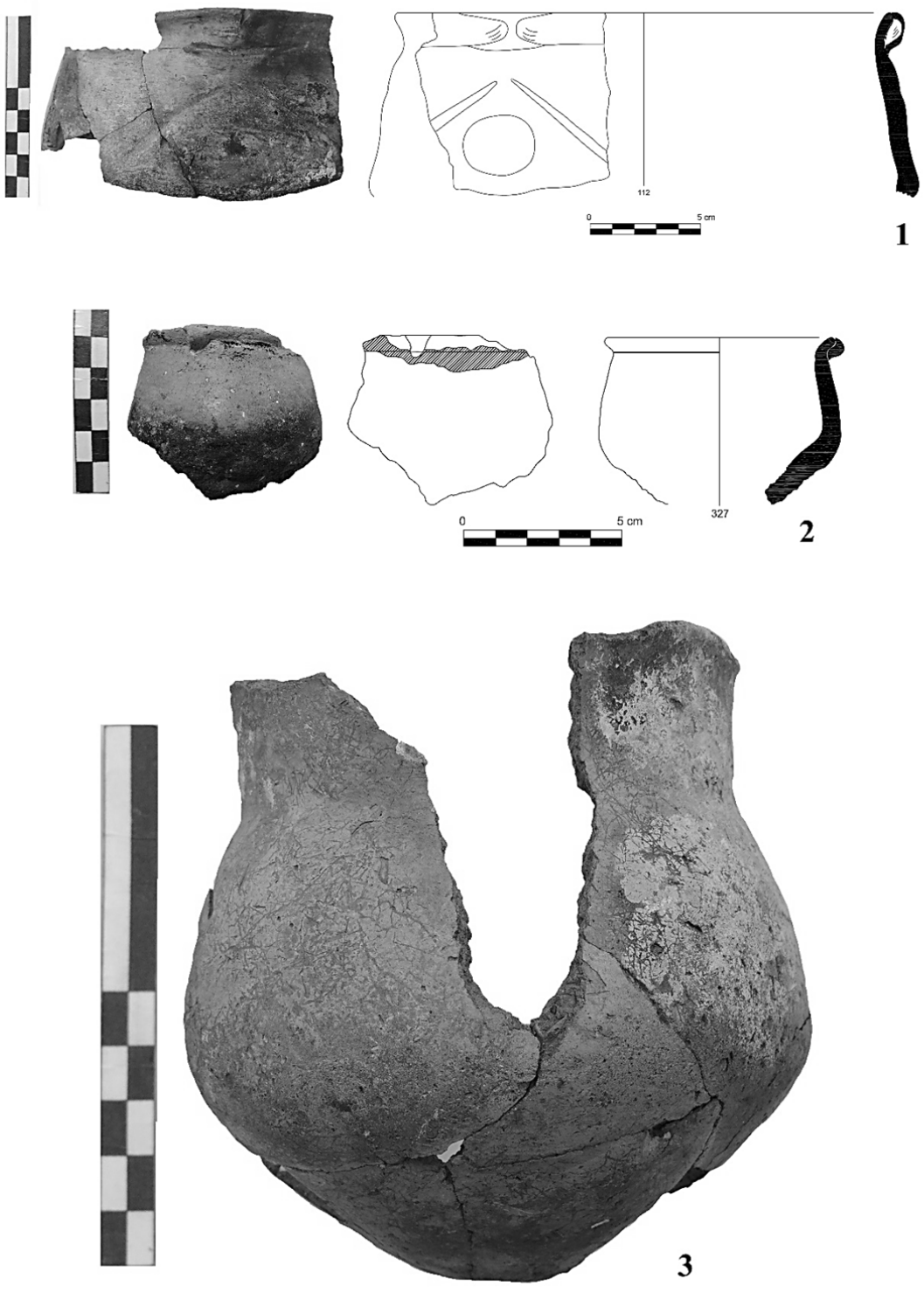

Fig. 48. Ceramics from S306 in trench 12I8

Fig. 49. Plan of architectural remains of phases 3 and 4, trench 12J21

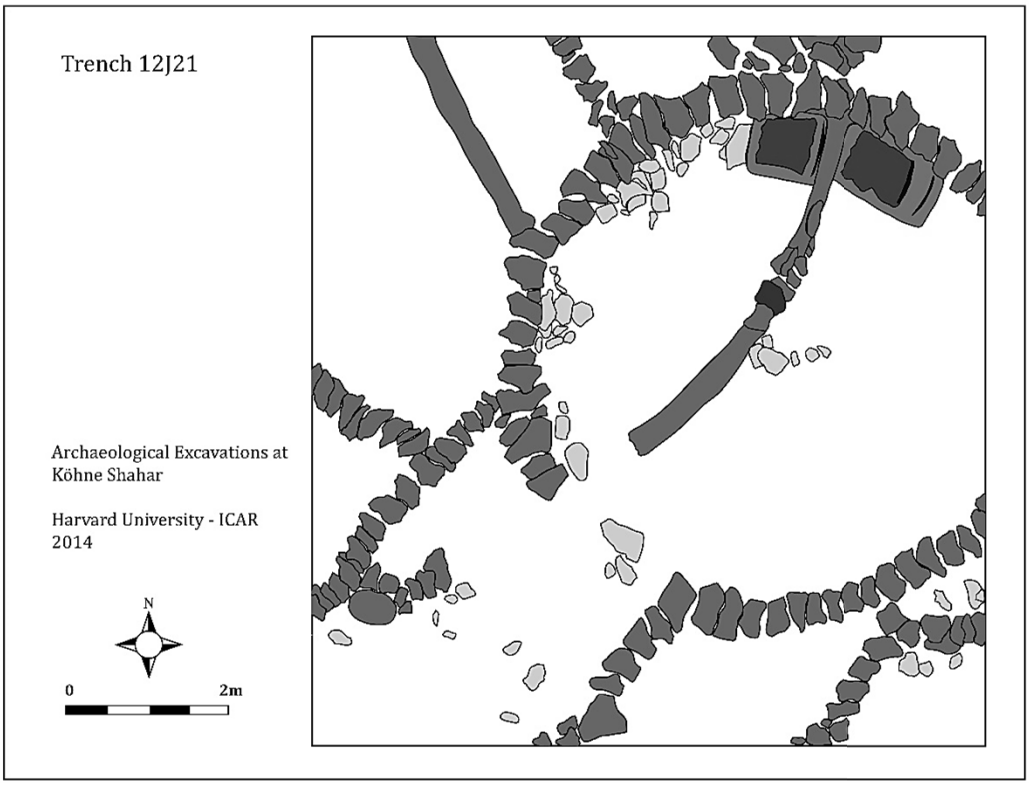

Fig. 50. Plan of architectural remains of phase 4, trench 12J21

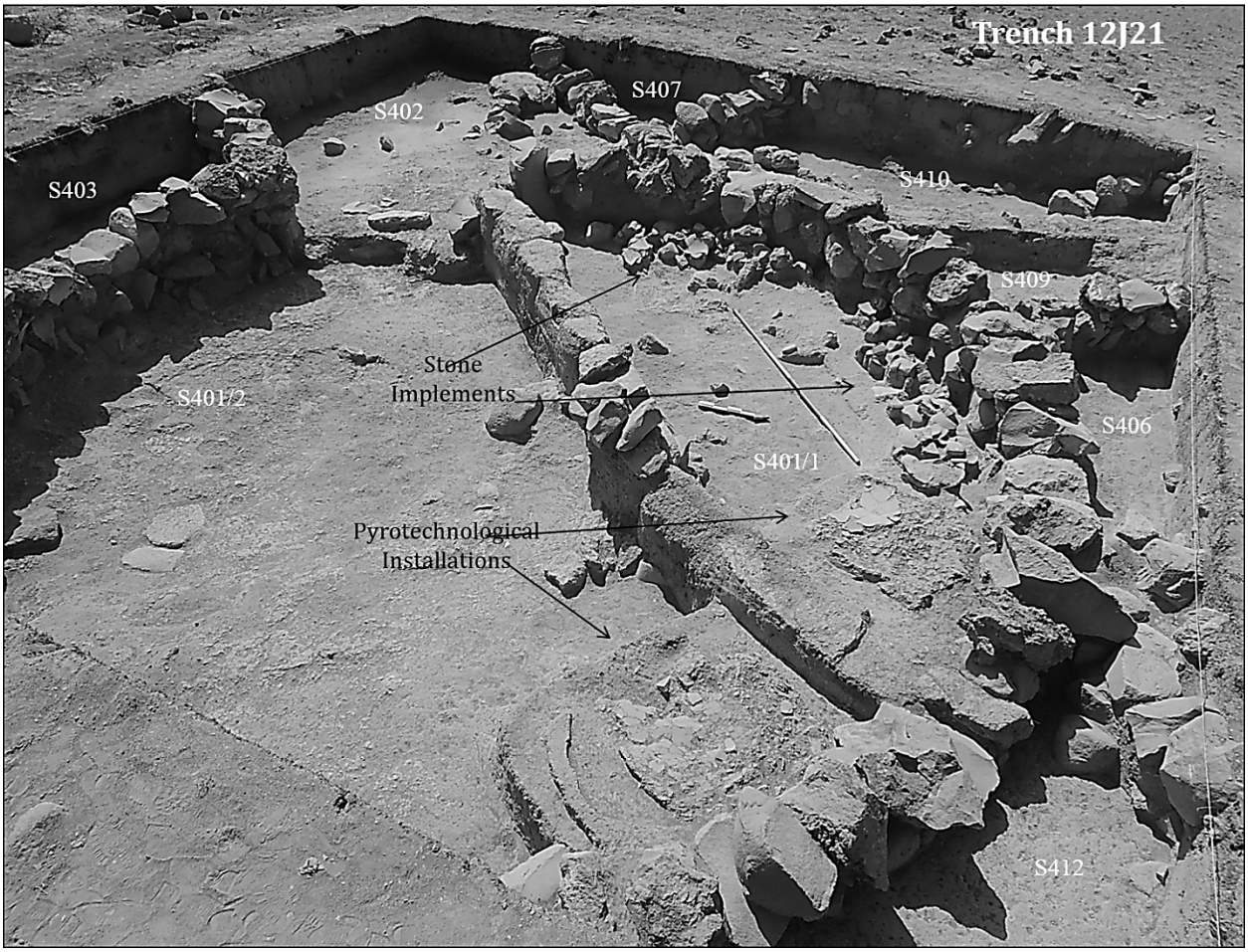

Fig. 51. Architectural remains, trench 12J21

As mentioned earlier, S401 was divided into two smaller space S401/1 and S401/2 by a **pisé** wall, probably a partitioning wall. However, in the middle of the **pisé** wall, there is a large boulder stone surrounded by smaller cobbles (Figs. 49-51). This large stone is located close to the center of the room and could have been used as column base. Along the circumference wall (F02) inside of S401/1 (Fig. 51) many stone implements such as pounders, hammer-stones, and anvil stones were recovered (Fig. 53).

Two pyrotechnological installations are situated in both sides of the partitioning wall standing about 35cm above the surface floor of the building. Both structures were supported by small cobbles, and a final supporting layer of thin reddish orange flat stones and gravel. On the top, a hard clay plaster was used as a surface of the structure that is delimited by remnants of a thin (2-3cm) wall (Figs. 49-52). Overall, each of these structures are about 50×50cm in size but unfortunately there is nothing remained from their walls to let us estimate the height of these installations.

Deposits within this space also were mostly ashy and there were a lot remnants of burned materials. However, ashy deposits are not as homogeneous as those in S101 and S306. Deposits from S401 are more or less similar to S202. Many slag fragments in two small piles were uncovered in S411 next to S401 and area of ashy homogeneous deposits was documented out of the entrance in the southwestern corner of the trench. Among this ashy deposits (L415) we uncovered one more clay token (Fig. 54: 1) similar in shape to those found in trench 13J1but a bit bigger than them. From the same matrix (L415), we also recovered a piece of ceramic tube that could have been used as tuyère to blow oxygen into pyrotechnological installations (Fig. 54: 2).

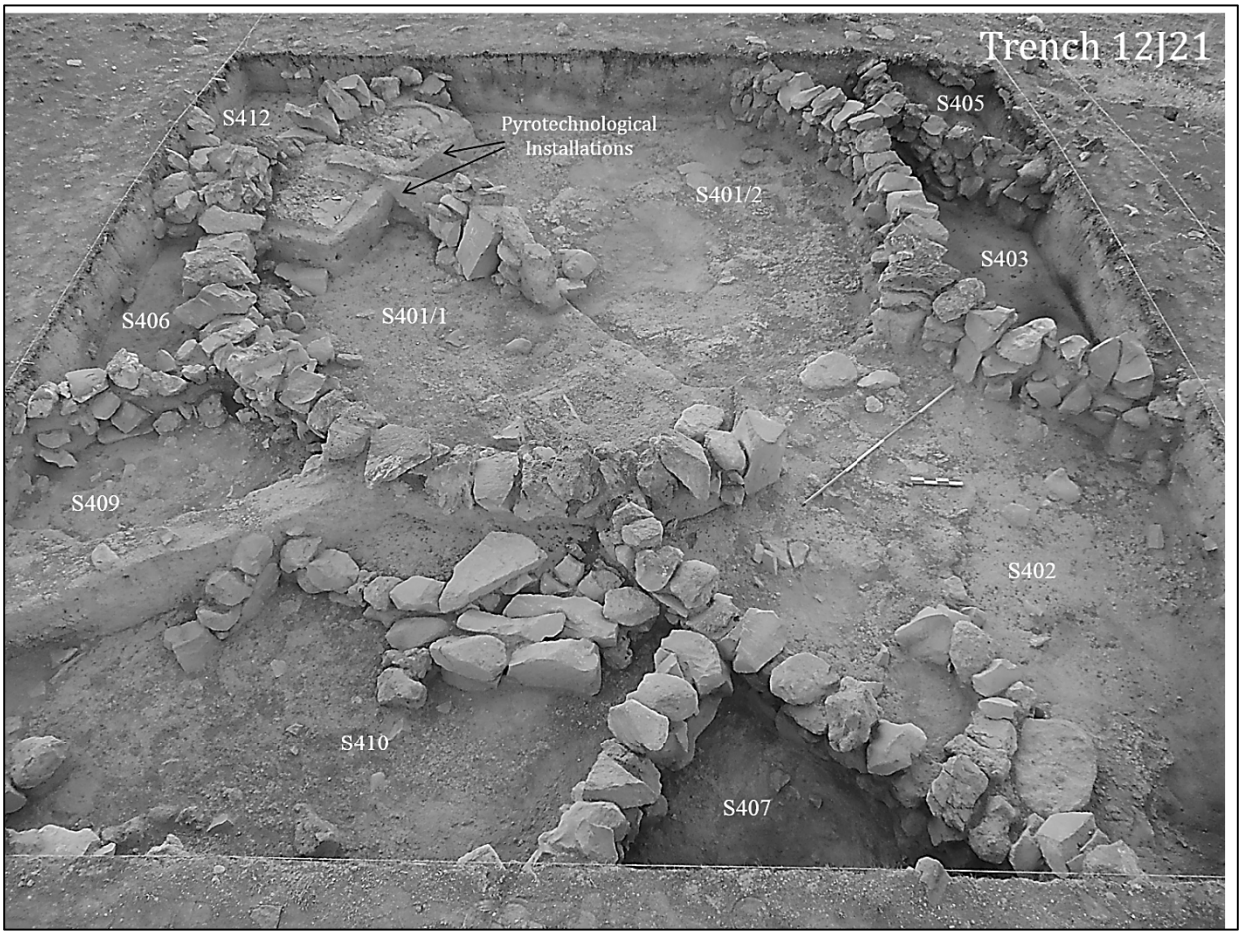

Fig. 52. Architectural remains, trench 12J21

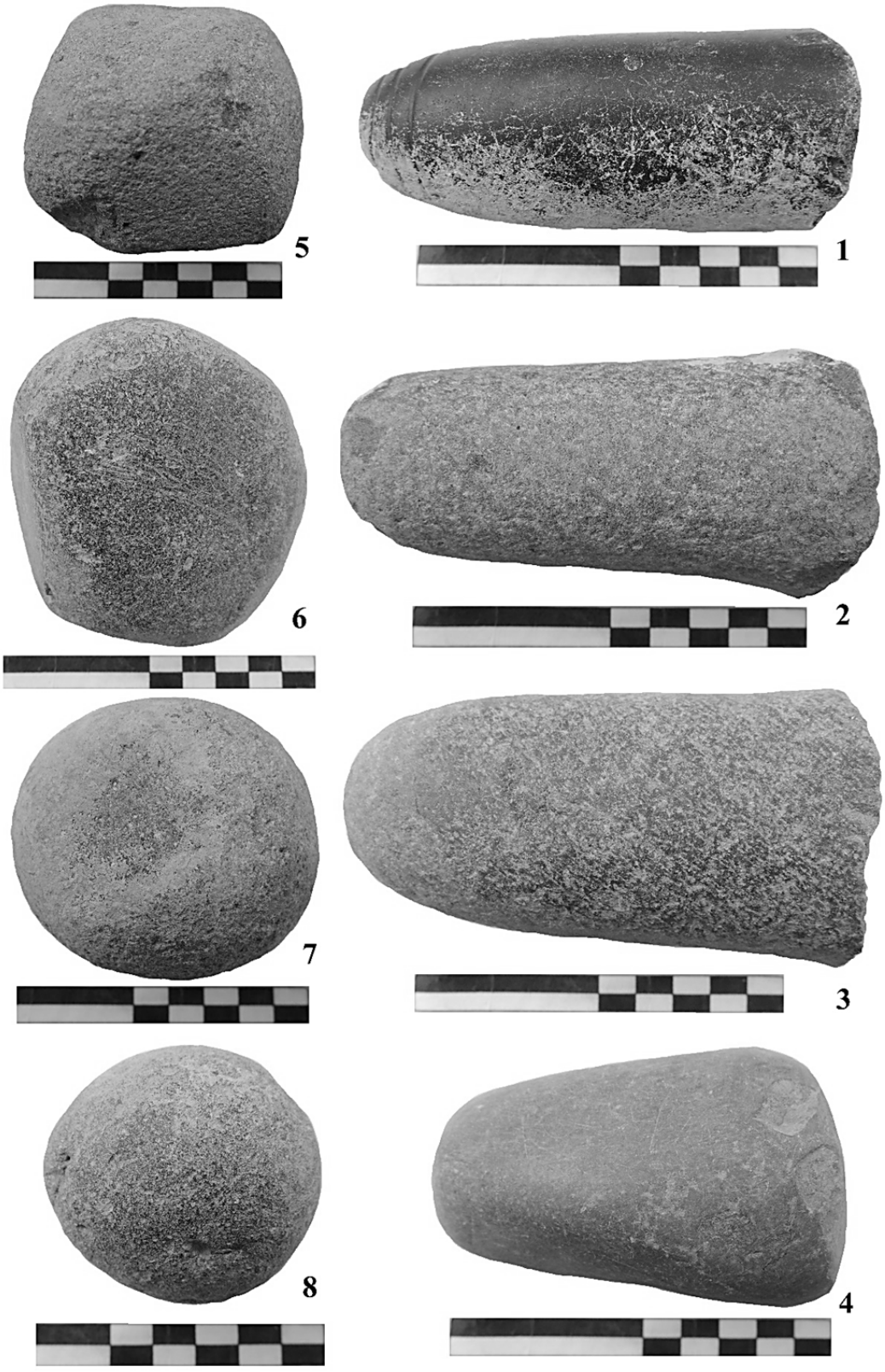

Fig. 53. Stone implements from S401, trench 12J21

1

2

3

Fig. 54. Some objects from trench 12J21

Other materials from S401 include a metal object found near the entrance of the building (Fig. 54: 3), bone tools (Fig. 55: 1-2), unknown stone objects (Fig. 55: 3), objects similar to weighting stones (Fig. 55: 4), a small ceramic container similar to crucible (Fig. 55: 5), and many stone beads. The ceramic assemblage includes both shard fragments and complete vessels with various types of Kura-Araxes decorations (Fig. 56: 1-3, 5-7). A selection of ceramics from S401/1 and S401/2 are shown in Figure 56. However similar to other trenches, this trench also contained ceramics that differed from typical Kura-Araxes ceramics in paste color, surface treatments, and probably in manufacture (Fig. 56: 4, 8).

As I discussed earlier in stratigraphy and ceramic typology about relative chronology of the site, the last phase at the site could be dated roughly to mid-third millennium BC. There are some hints that even suggest the possibility of higher date. As I discussed earlier, I could not found good parallels for painted ceramics in the citadel in Kura-Araxes settlements and it is highly likely that these painted ceramics represent inter-regional interactions with northern Mesopotamia. One type of painted designs, black dots in row on shoulders of ceramic vessels (Fig. 56: 4, 8) may find parallels in Arslantepe VA which is dated to the Middle Bronze Age (Di Nocera 1998, Tafel 34: 7-8 and Tafel 35: 16). Although our painted ceramics are still limited in number, I may suggest that the relative date of the last phase could be pushed high to the last centuries of the 3rd millennium BC. Overall, evidence suggests that S401 were also used as a workshop unit for manufacturing, although commodities were manufactured in this workshop are subject to further analyses.

Structure 502 (12H25): One trench, 12H25, was opened to the west of the central plaza, which contained the remnants of several buildings (Figs. 57-60). Among them, S502 in

eastern half of the trench is more important for us since a bigger area of S502 was uncovered and I have better understanding about its function.

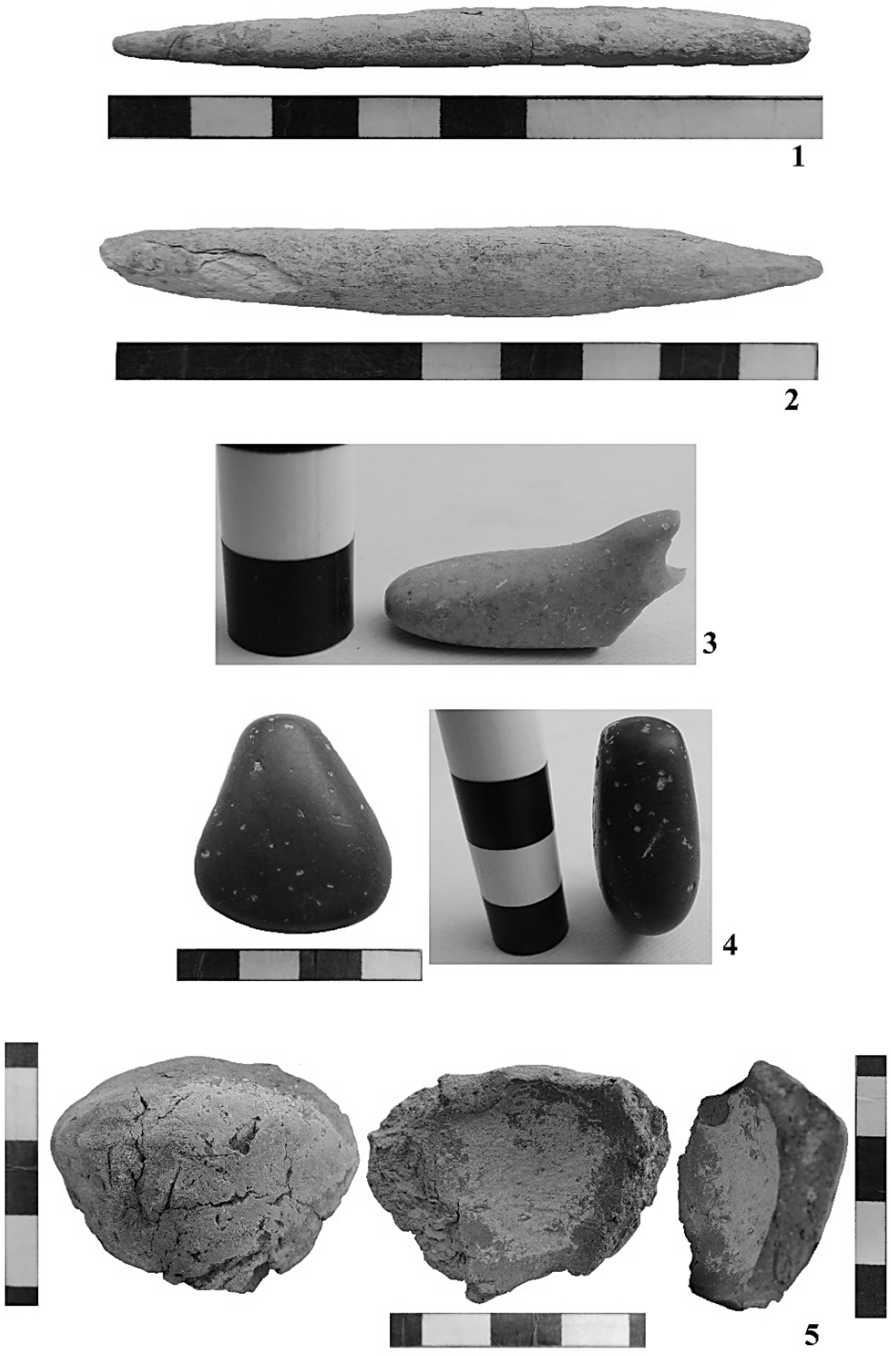

Fig. 55. Some objects from trench 12J21

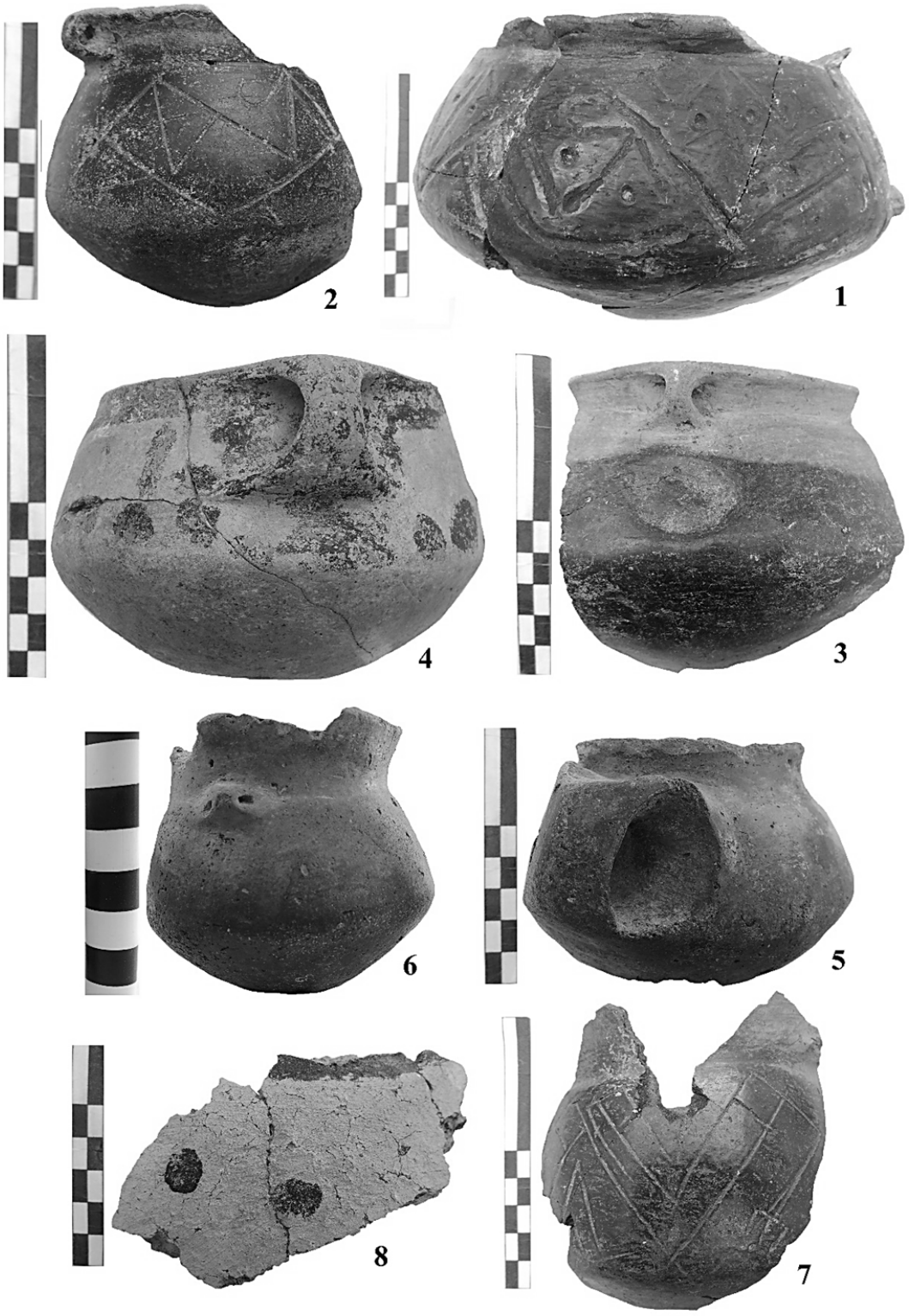

Fig. 56. Some of ceramics from S401 in trench 12J21

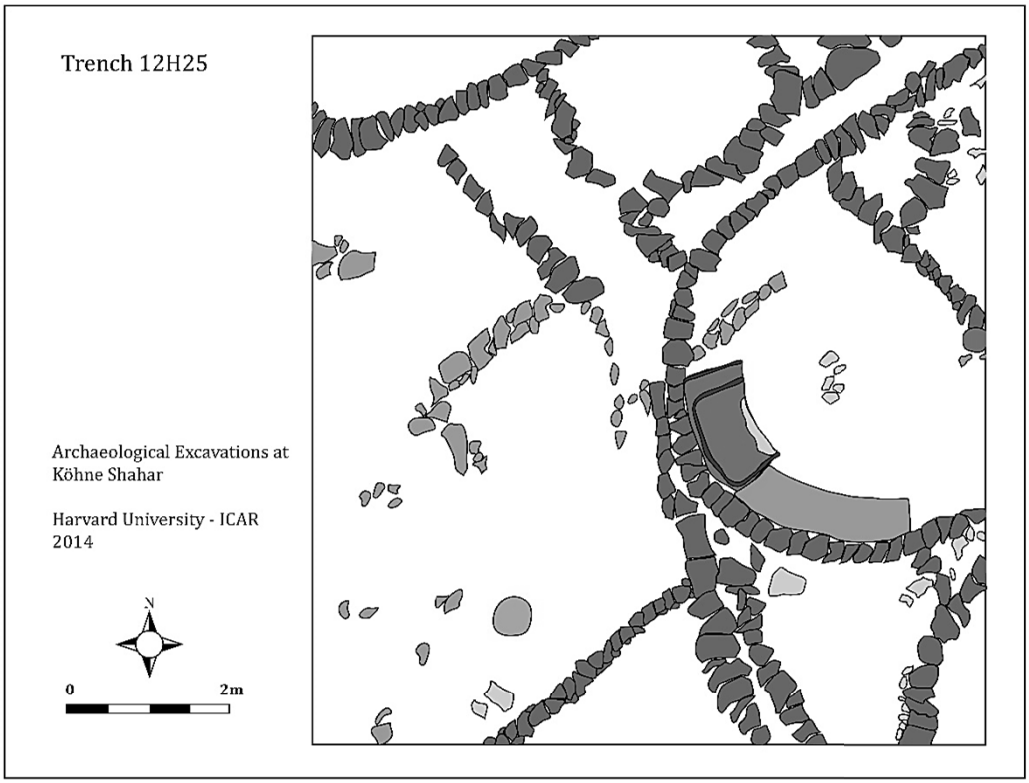

Fig. 57. Plan of architectural remains of phases 3 and 4, trench 12H25

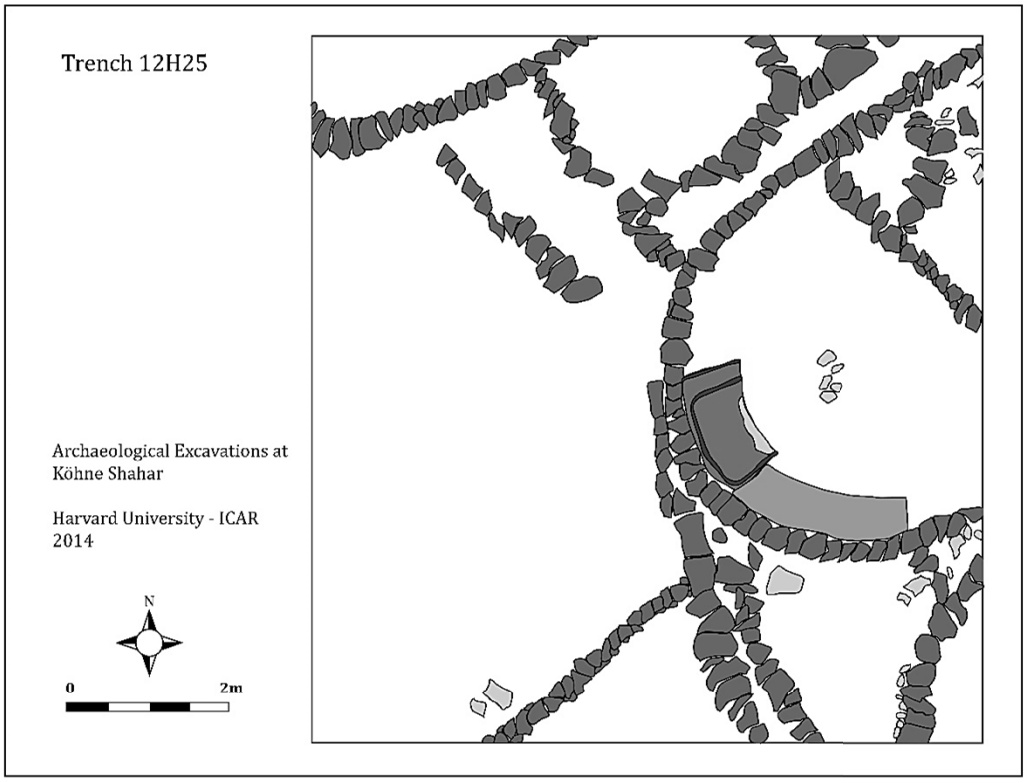

Fig. 58. Plan of architectural remains of phase 4, trench 12H25

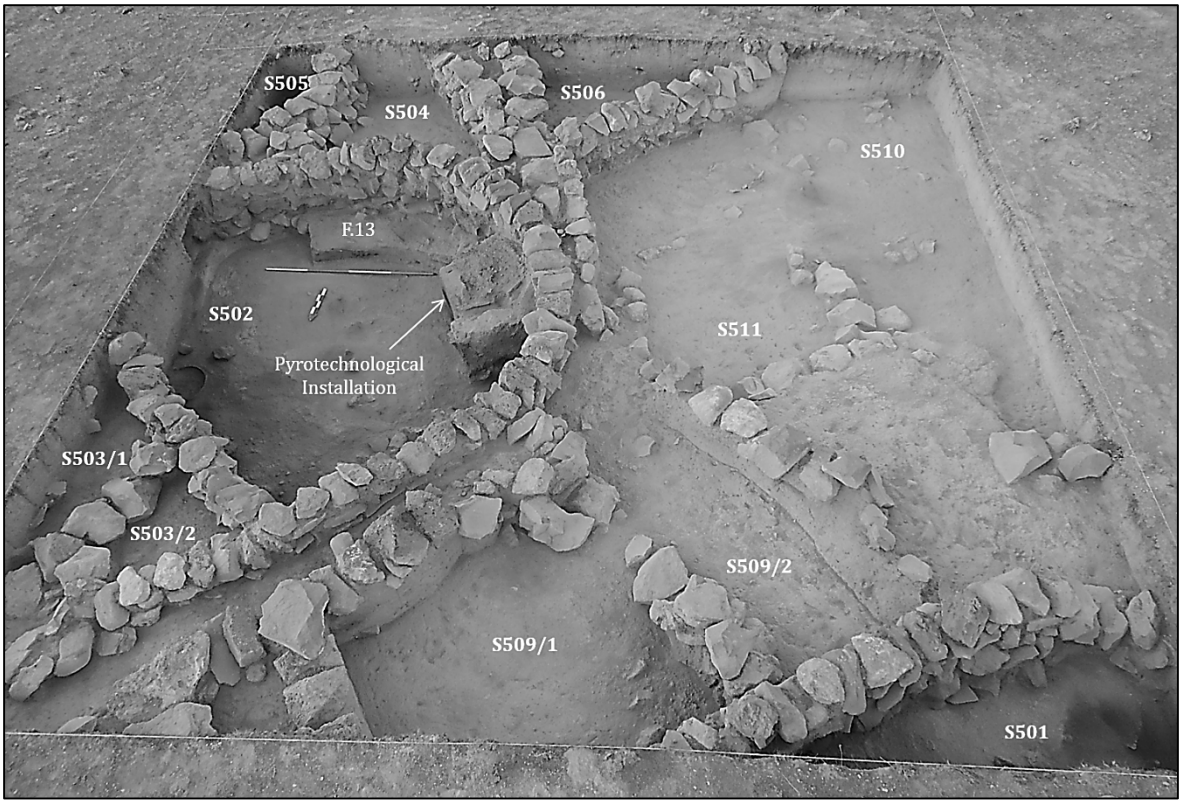

Fig. 59. Architectural remains in trench 12H25

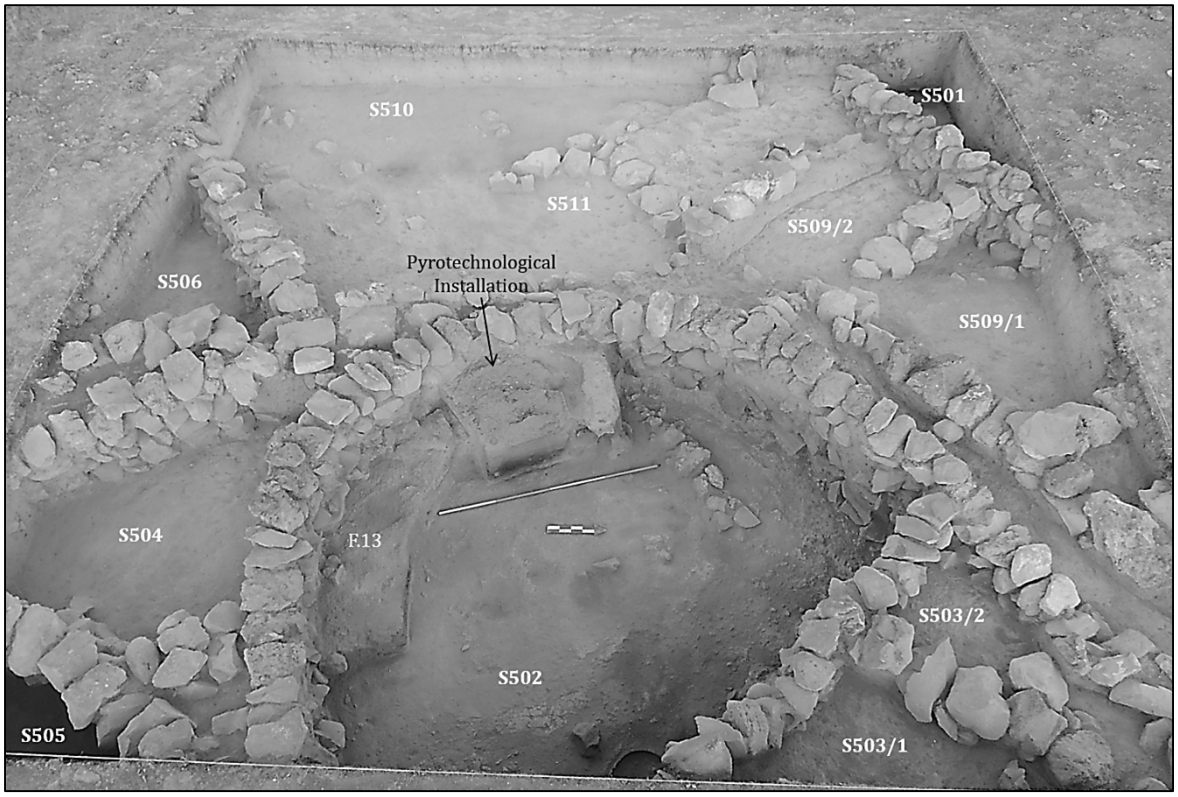

Fig. 60. Architectural remains in trench 12H25

S502 consists of a half oval-shape building which is delimited by a straight wall to its eastern side. It was preserved to about 1m height and was made of cobble-stones, either basaltic or limestone. Mud-mortar was used among stones and we could detect remnants of a thick (2-4cm) mud plaster on the interior surface of the wall. Within the building two features were uncovered; a pyrotechnological installation (furnace) in the western most side and a mud-brick bench next to it (Fig. 61). Installation stands about 40cm above the surface floor of the building. It is about 60×60cm in size and like its counterparts in trench 12J21, it is delimited by a surrounding thin wall that is preserved only to 1-2cm. it is supported by small pebbles in the bottom and a final supporting layer of thin reddish orange flat stones and gravel. On the top, a hard clay plaster is used as a surface of the structure. Next to the installation there was a mud-brick bench with few bricks in one course standing about 20cm (Figs. 57-60). Above the bench we recovered several stone implements such as pounders, hammer-stones, and anvil stones (Fig. 61).

Deposits from this building is very similar to what we saw in S401 and had seen in S202. Ceramics found within S502 are all typical of Kura-Araxes material culture (Figs. 62-63). Other materials from S502 include two fragments of slags, many stone beads in various colors, stone implements such as pounders, anvil stones (Fig. 64), an unknown stone implement (Fig. 65), and a clay wheel (Fig. 66: 1). We also recovered two pieces of tube-like objects that could have been used as tuyères to blow oxygen into pyrotechnological installations. One of them was found from S502 (Fig. 66: 4) and the other one in S504 (Fig. 66: 5). In addition, we recovered some bone tools (Fig. 66: 2-3, 6).

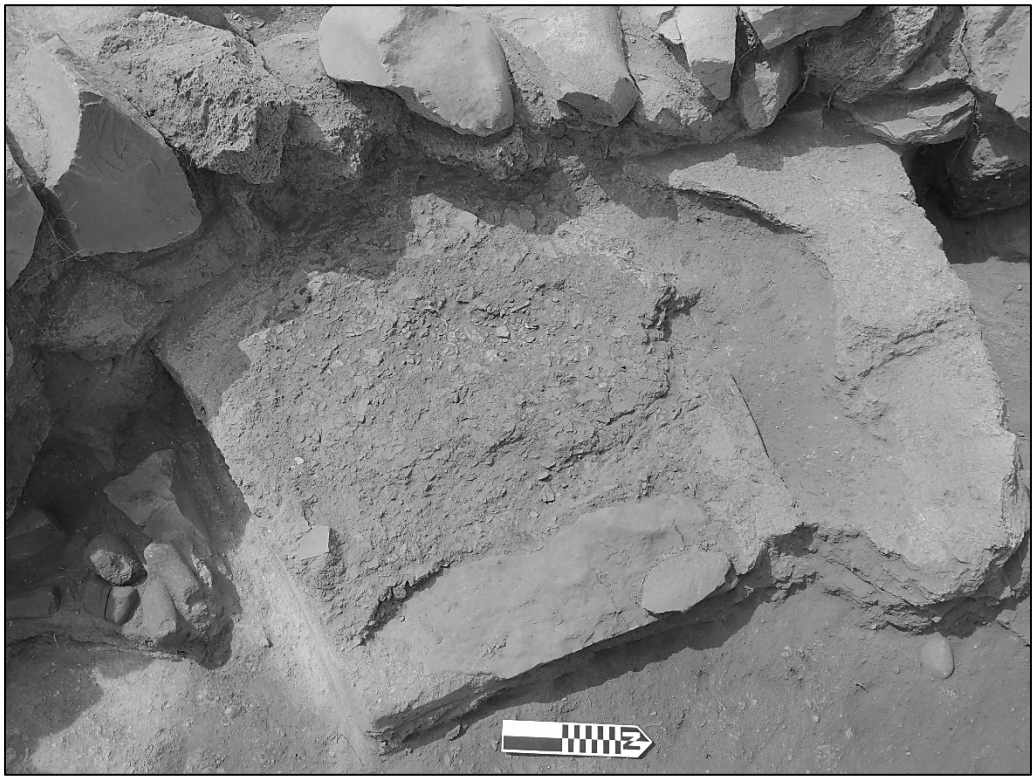

Fig. 61. Pyrotechnological installation (furnace) in trench 12H25

Among objects, there was also an elegantly manufactured tiny container that seemed special object compared to others (Fig. 67). This container is made of either ivory or bone. It has a cap with three hole on it and two holes on two sides of its orifice. It is less than 2cm in height and about 1cm in width. Both container and its cap are decorated by many carved dot-in-circle designs, six dot-in-circles in the bottom, six dot-in-circles on the cap, and many on it is body. I have not found any parallel of this small container in Kura-Araxes settlements. However, in terms of decoration we may find very interesting parallels on stone containers and other objects from the 3rd and early 2nd millennium BC settlements in Persian Gulf region, eastern, and southeastern Iran, Indus world, and even Central Asia (see David 1996; 2002; Potts 2008; Read and Searight 2001; Morello 2010; 2014).

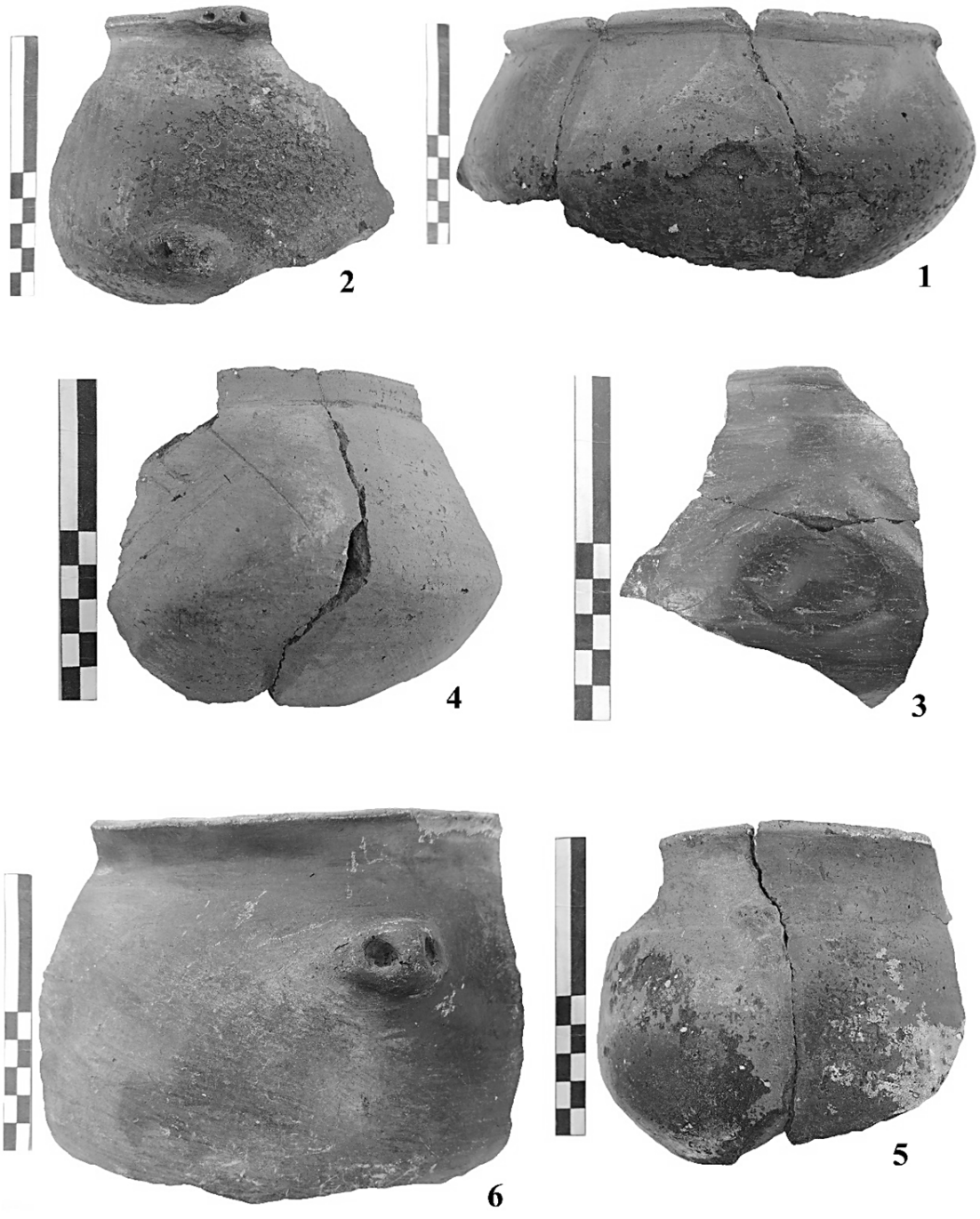

Fig 62. Some of ceramics from S502 in trench 12H25

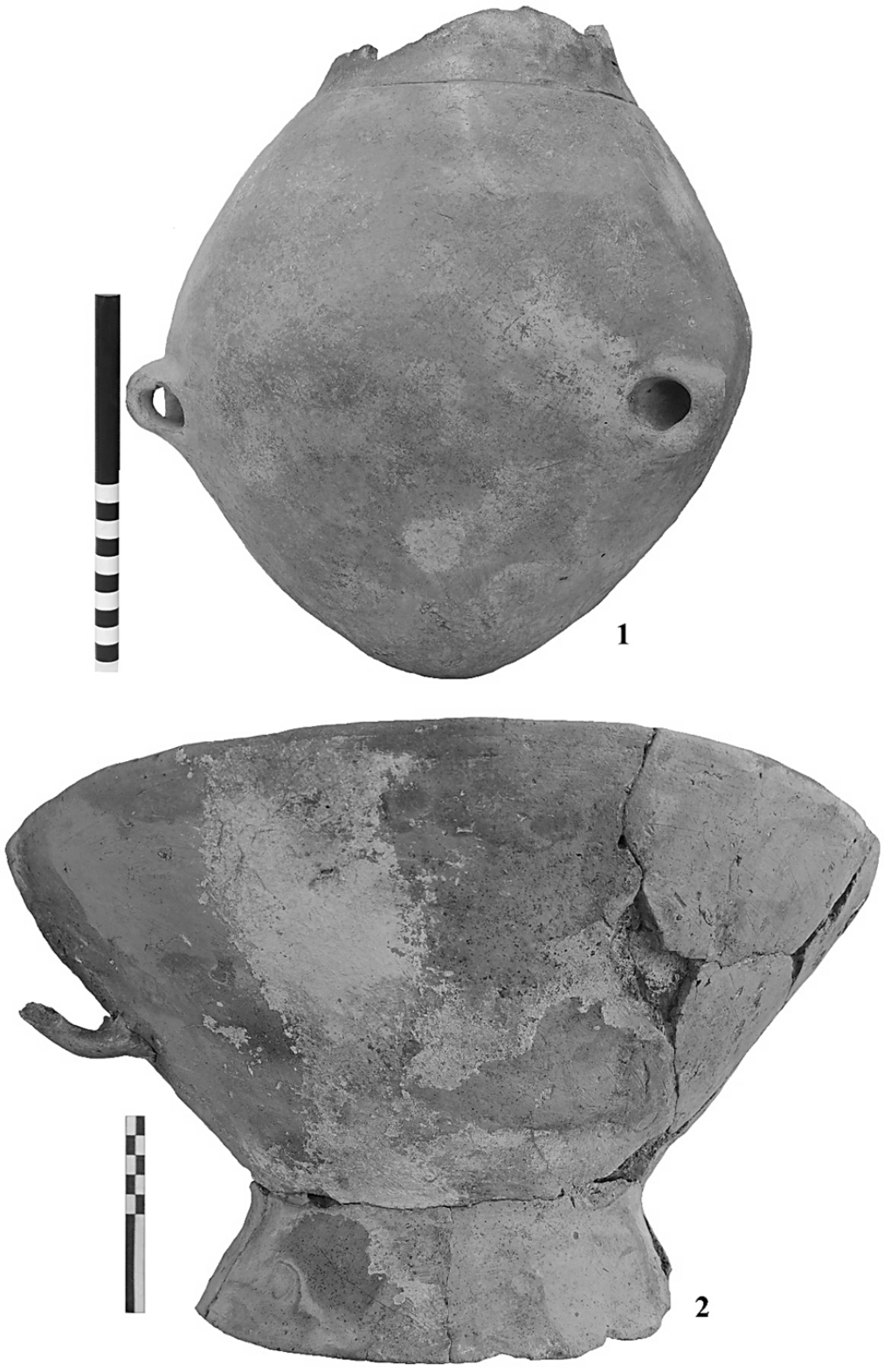

Fig. 63. Two of large ceramic vessels from S502 in trench 12H25

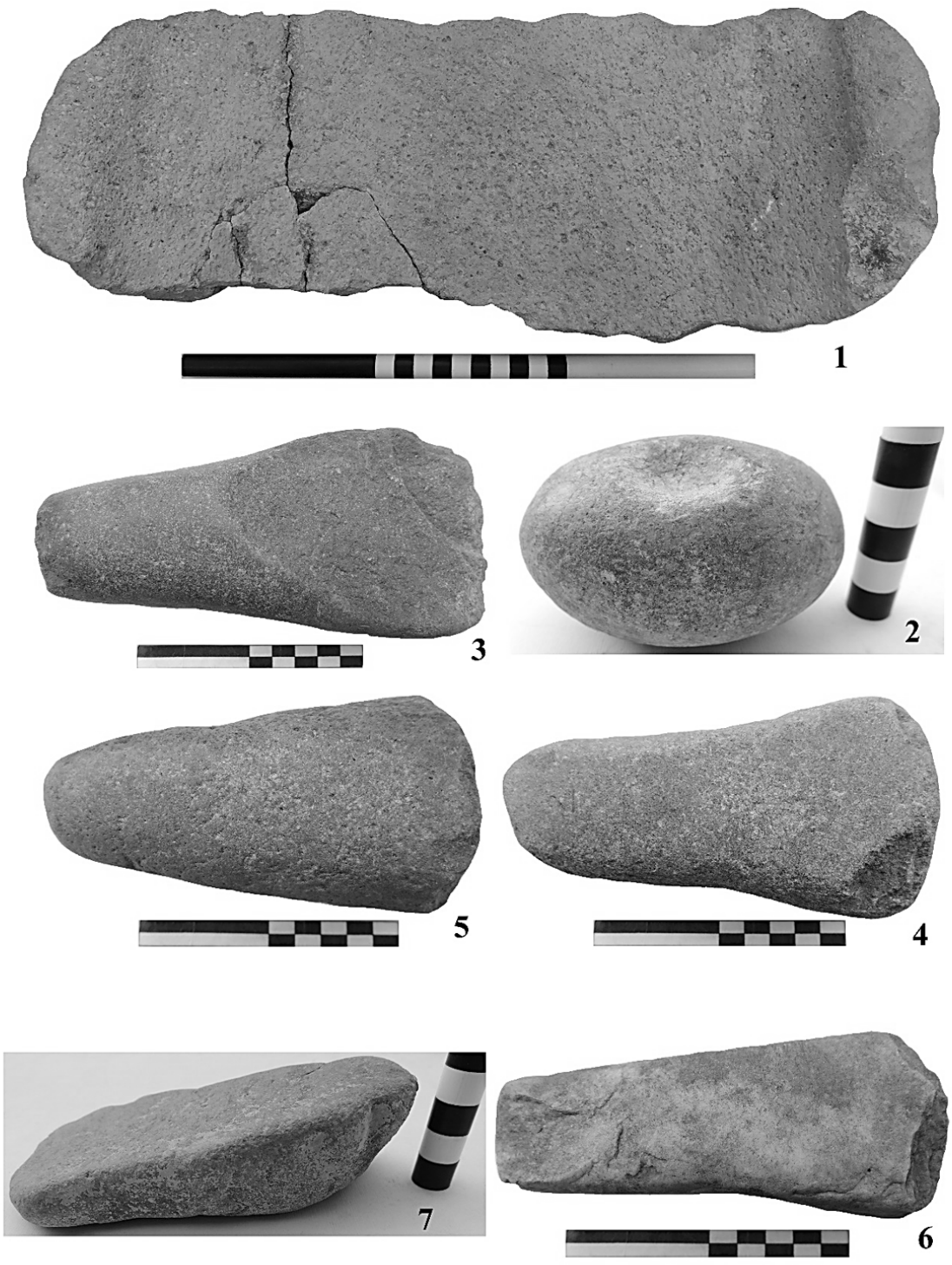

Fig. 64. Stone implements from S502 in trench 12H25

Fig. 65. A stone implement from S502 in trench 12H25

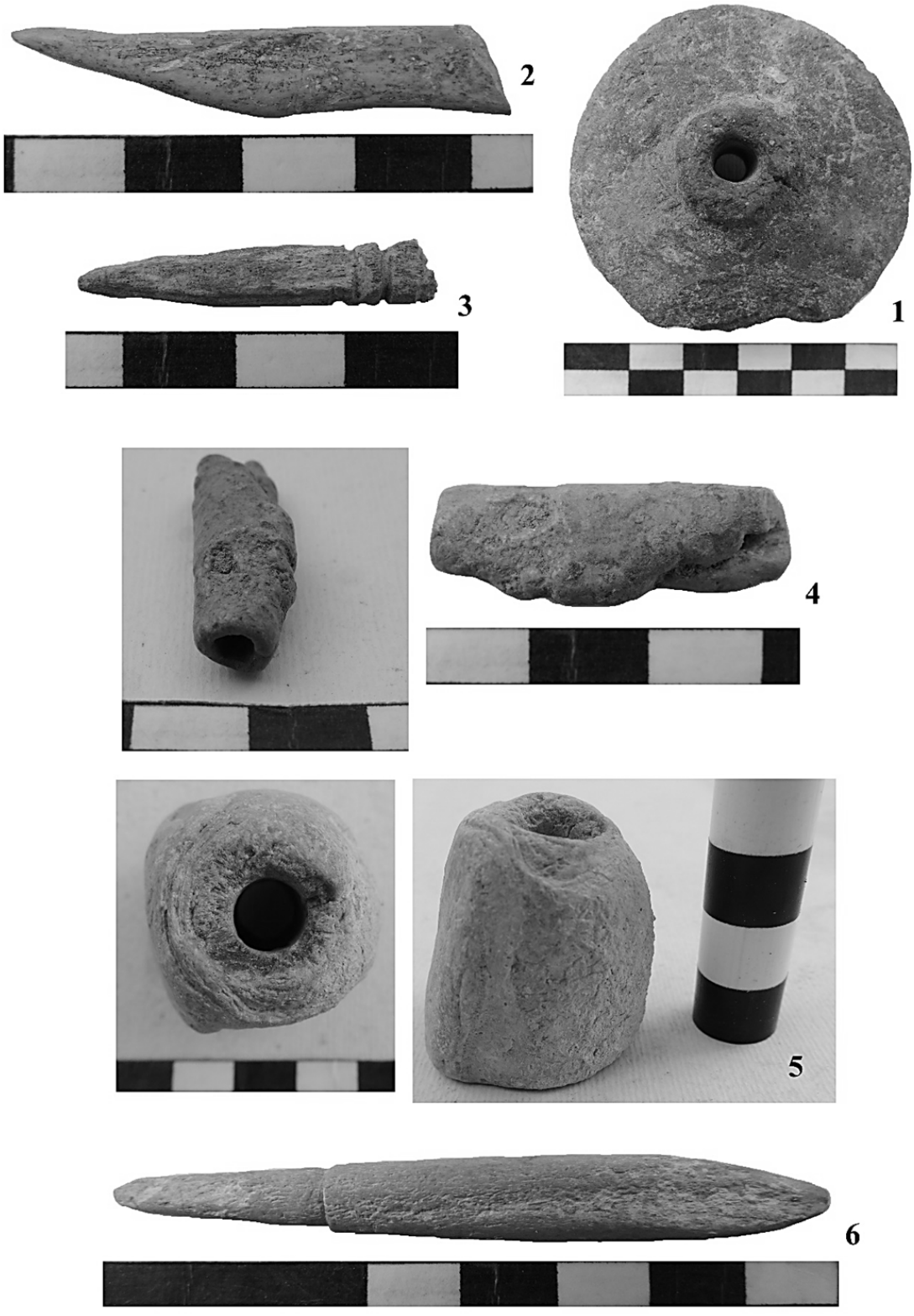

Fig. 66. Objects from S502 in trench 12H25

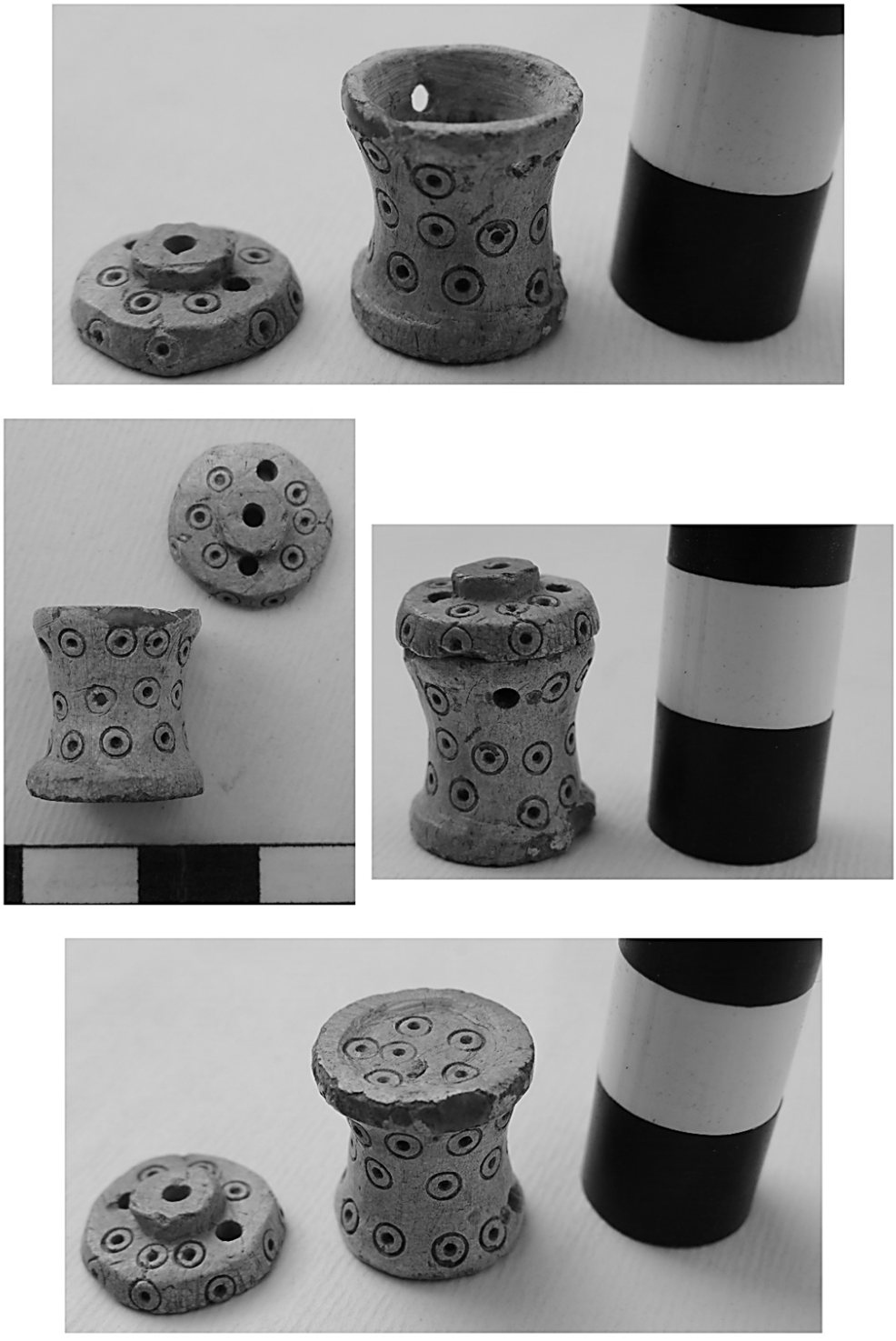

Fig. 67. Small object from S502 in trench 12H25

There are traces of drilling visible inside of the container indicating that its orifice was drilled by something. Its surface is polished and shiny. Obviously the time and energy invested in manufacturing this object went beyond its functionality and one might consider it a sumptuary object. Evidence from S502 also suggest that it was used as a workshop unit for manufacturing. Although I do not know yet what kind of commodities were manufactured in this workshop, I assume that it was used as a multi-purpose workshop unit and it is likely that more than one commodity was manufactured here.

Structure 601 (10G5): in order to understand the nature of archaeological deposits out of walled area or the citadel, trench 10G5 (10×10m) was opened beyond the fortification wall to its northwestern corner and in slopes of the citadel (Figs. 8-9). Thus, the trench in its southern side was excavated to depth of approximately 80cm and in the northern side to depth of 20cm. Portions of a rectangular building, S601, with stone walls were uncovered in the southeastern corner of the trench (Figs. 68-71).

Remnants of the rest of the building were visible on the surface so the overall dimensions of the building could be estimated. The walls are mostly made of cobbles, either basaltic or limestone. The western wall was preserved to 30cm and the northern wall to about 50cm. Only one course of stones was documented in the western wall while the northern wall survived to three course of stones. On the interior surface of the walls there were remnants of a mud plaster (2-3cm thick).

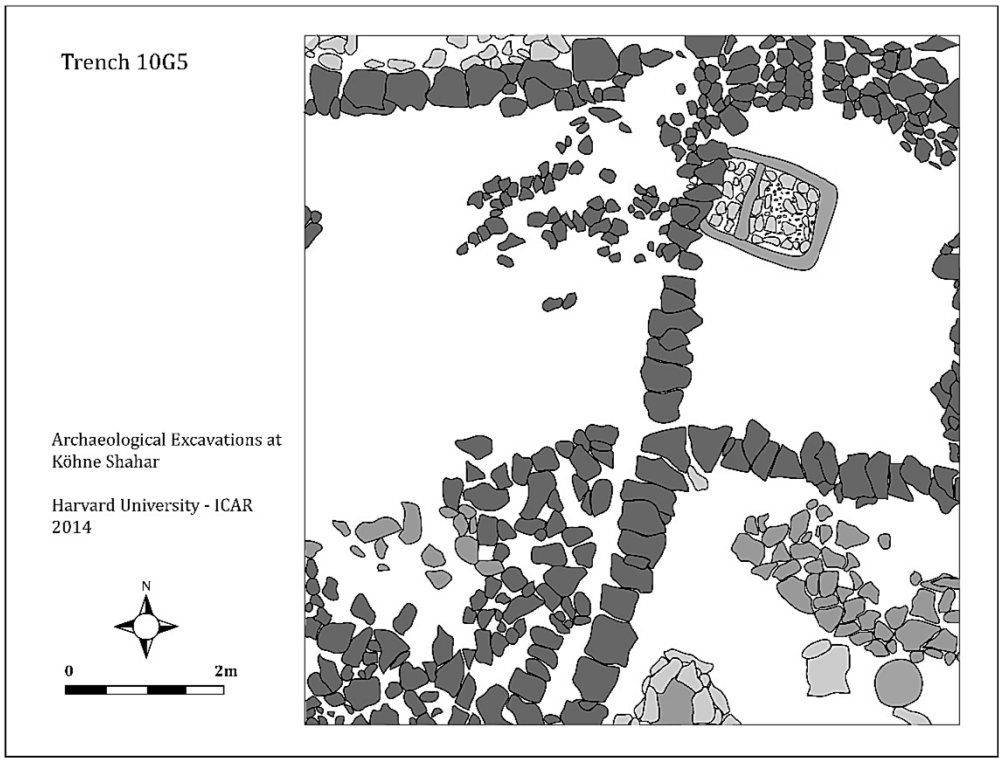

Fig. 68. Plan of architectural remains of phases 3 and 4, trench 10G5

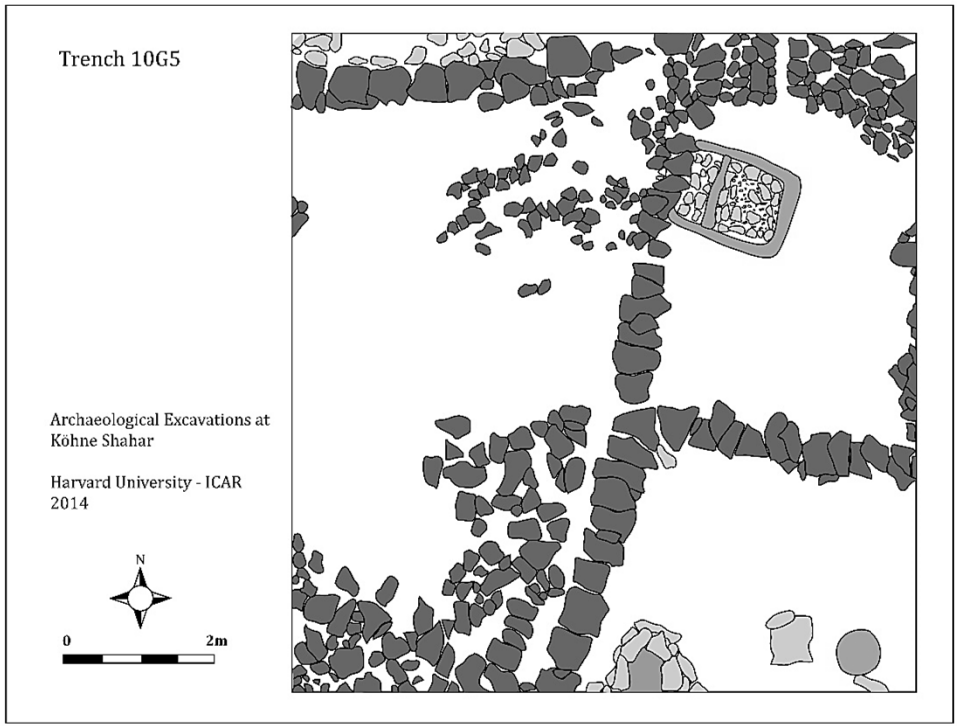

Fig. 69. Plan of architectural remains of phase 4, trench 10G5

Two features characterize this structure: remnants of a large jar in the southeastern corner of the trench and an unknown stone structure (F.03) near the western wall (Figs. 68-71). There was evidence for at least one floor level within this room which was detected both within the room and in the sections of the trench. The floor level was a thick (2-3cm) mud-plaster or a compressed surface.

Materials recovered from S601 include stone implements (Fig. 72: 1, 3), a clay wheels (Fig. 72: 2), one obsidian blade (Fig. 72: 4), and many ceramic shards (see a selection in Figure 73). Compared to trenches in the citadel, materials recovered from trench 10G5 are in low quantity. However, ceramic assemblage recovered within S601 shows both typical of Kura-Araxes material culture (Fig. 73: 1, 3-5) and ceramics that differed from typical Kura-Araxes ceramics in paste color, surface treatments, and probably in manufacture (Fig. 73: 2).

In order to make sure about possible multiple floor levels, further excavations within S601 led to appearance of remnants of features from earlier phase (F.04) or phase 3 (Figs. 68-71). About two dozens of cobble stones in alignment appeared in the middle of S601 that stratigraphically is situated below that floor level. I do not know what feature this alignment of cobbles represents, but it points to the fact that there was occupational continuity outside of the citadel as well. It will be necessary to open a test trench for stratigraphy of occupational phases outside of the citadel in the future investigations. Continuity of occupational phases outside of the citadel has significant implications about spatial organization and social structure at Köhne Shahar.

Structure 602 (10G5): in the northeastern portion of the trench 10G5 we also uncovered another rectangular building that shares its southern wall (F02) with S601. Portions of a rectangular building, S602, with stone walls were uncovered in the northeastern corner of the

trench (Figs. 68-71). Like other buildings, the wall bases are mostly made of cobbles, either basaltic or limestone. Its western wall was preserved to about 20-30cm and the southern wall which is shared with S601, to about 50cm. Two course of stones were documented in the western wall while we could document three course of stones in the northern wall. Remnants of mud plaster (2-3cm thick) of walls were also detected on sections of the trench, on the floor surface, and on sometimes on the walls.

There was remnant of an unknown structure (F.09) near the western wall that was only feature uncovered from S602 (Figs. 68-71). This structure (F09) has two parts, one next to the wall which was separated by a mud-brick line from bigger portion towards the center of the building. The bigger or "main" part of the structure is a rectangular, 50×50cm, composes of a concentration of pebble stones in the bottom (even they have used broken stone implements among pebble stones as material) and then smaller flat reddish orange gravels among them and on the top and the whole structure is delimited by a surrounding greyish green mud-brick. Function of this structure remains unknown.

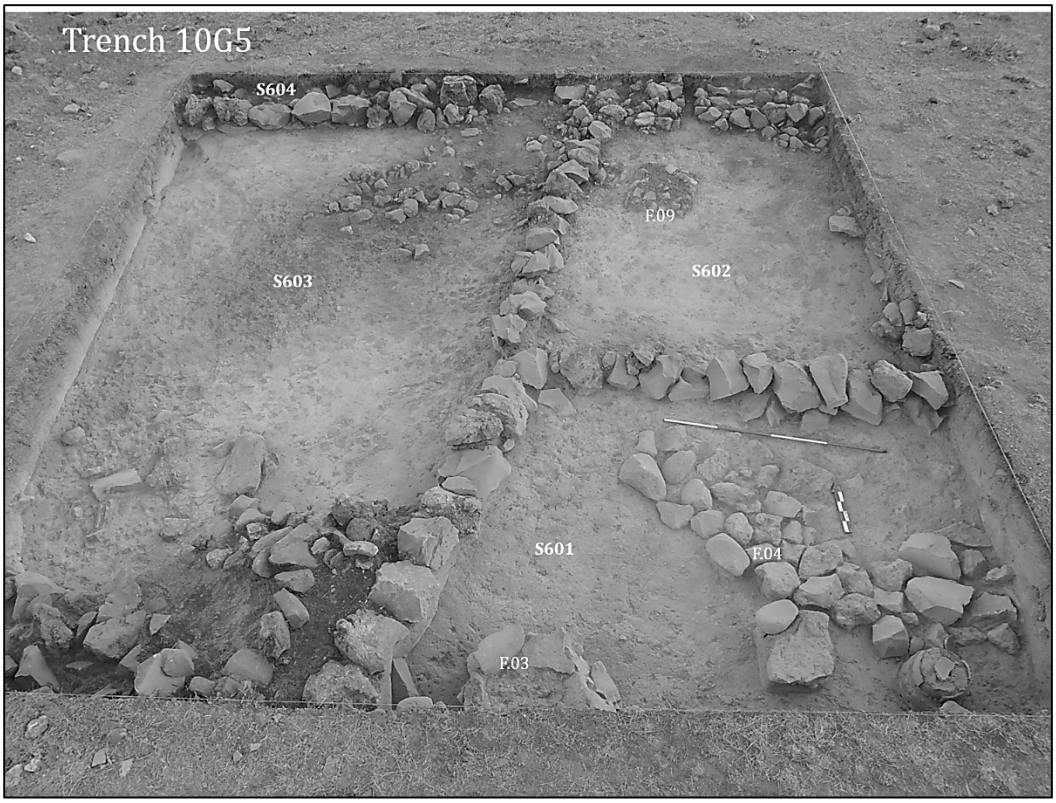

Fig. 70. Architectural remains in trench 10G5

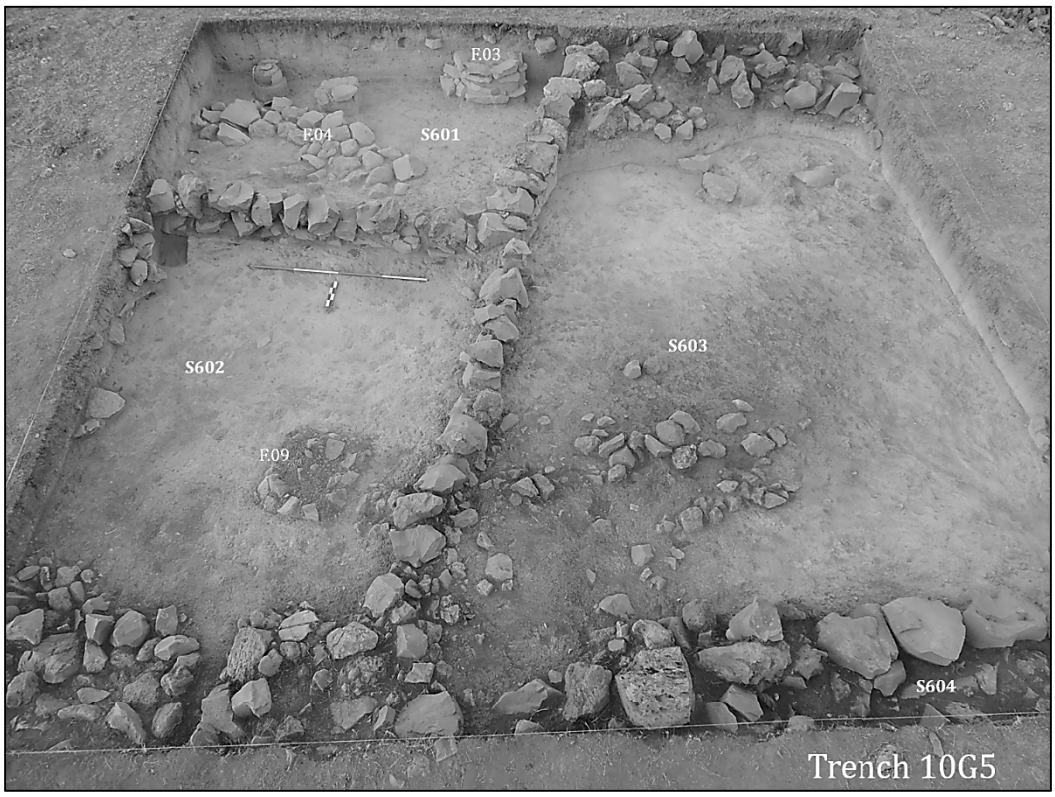

Figure 71. Architectural remains in trench 10G5

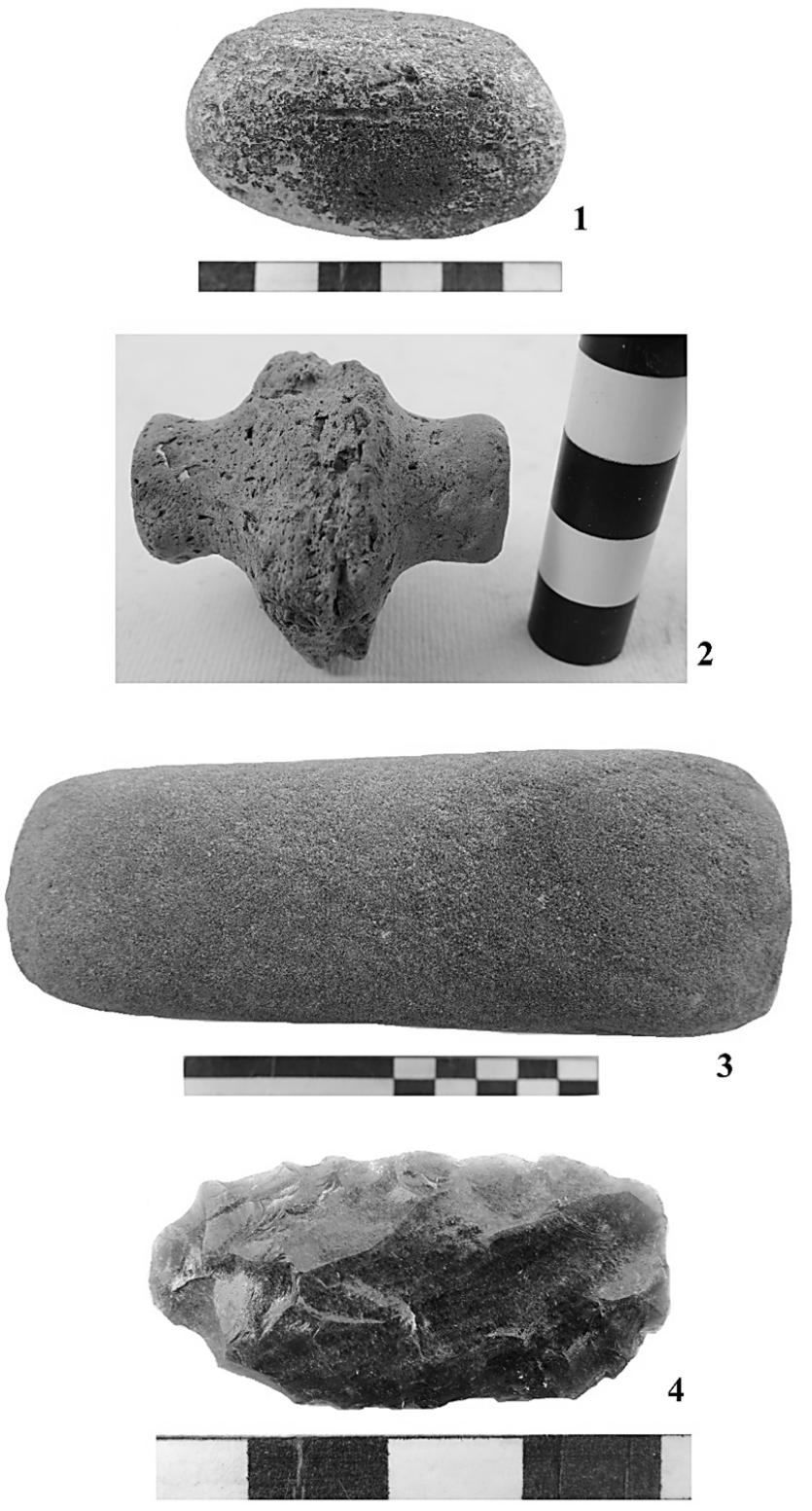

Fig. 72. Some objects from S601, trench 10G5

Figure 73. Ceramics from S601 in trench 10G5

Materials recovered from S602 include stone implements (Fig 74: 1-2) and a clay wheel (Fig. 74: 3). Ceramic assemblage recovered within S602 also shows typical of Kura-Araxes material culture (Fig. 74: 4-6). The last phase that I concentrated on revealed the same type of ceramics that we could see in the citadel. Comparisons with ceramics recovered from trenches inside of the citadel do not demonstrate any differentiation. This suggests that the last two occupational phases outside of the citadel are contemporaneous with the phase 4 and 5 inside of the citadel.

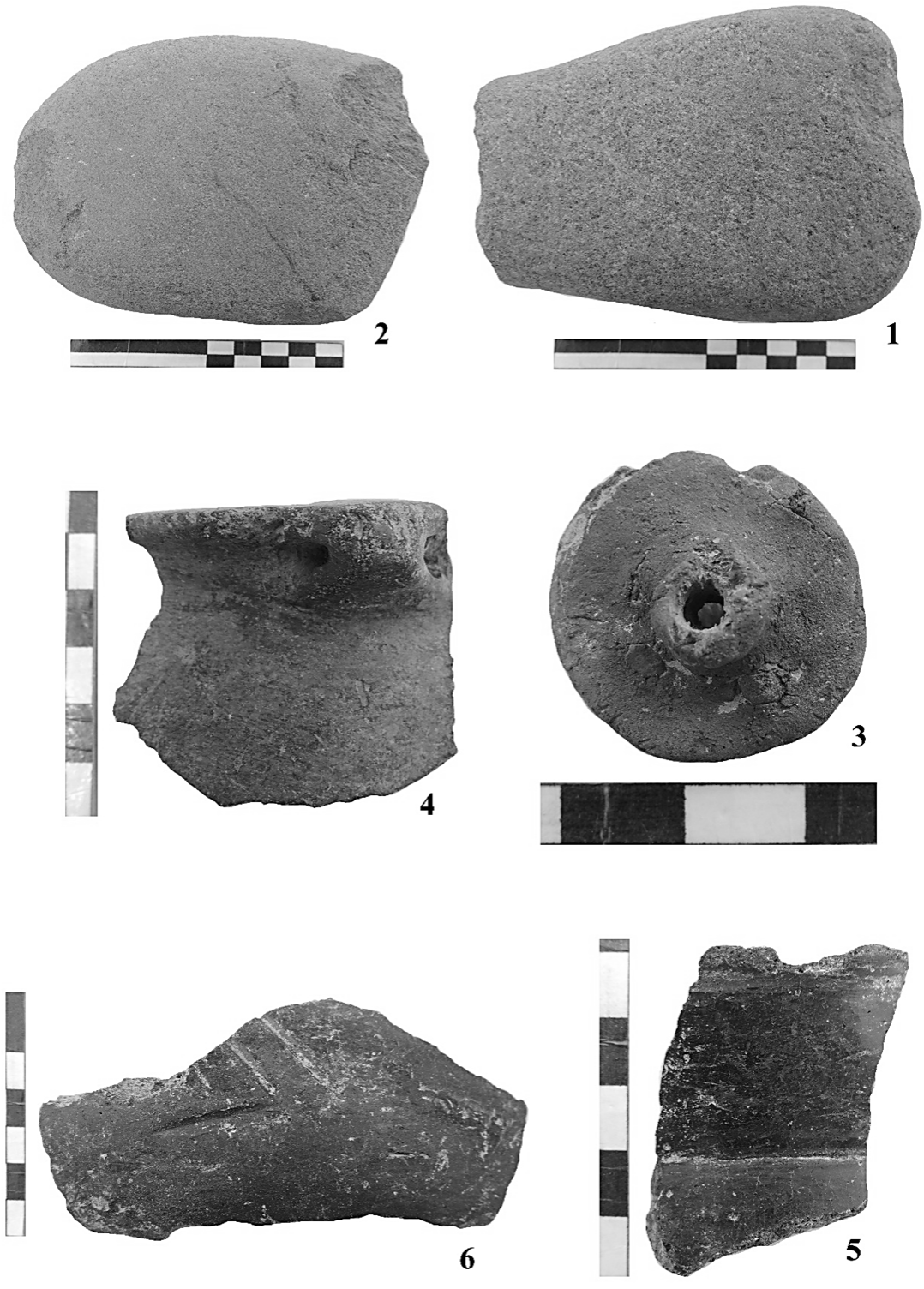

Fig. 74. Objects and ceramics from S602 in trench 10G5

The aforementioned structures in trenches 13J1, 13I5, 12I8, 12J21, and 12H25 are no doubt associated with workshops. There is no artifactual or contextual evidence of the domestic use of these spaces; all lines of evidence support the existence of production-related activities in three neighborhoods surrounding the central plaza in the citadel. Along with subsistence-related activities, such as animal husbandry and agriculture (Alizadeh, et al. forthcoming), the evidence suggests that at least a number of inhabitants were involved in craft production, which, in turn, suggests the existence of some level of labor specialization (Costin 1991).

Many features at Köhne Shahar such as its fortification wall, the platform, and central plaza suggest that this is not a typical Kura-Araxes settlement. Several buildings representing workshop units with associated materials in several trenches around the central plaza and a number of large storage vessels as well as some administrative technologies such as a stamp seal and sealing clay in trench 13I5, all were discovered in the same occupational phase. The workshop units were probably used for a mixed number of tasks (Samei, et al. 2013).

I do not yet know whether tokens bear a numeric value and are associated with a particular type of commodity. However, I do know that these features are not common in the Kura-Araxes settlements (see chapter 3). For instance, the total number of seals recovered from Kura-Araxes settlements in southern Caucasus are not more than ten (Sherazadishvili 2014: 168) and also recently at Kul Tepe, another Kura-Araxes settlement in Iranian Azerbaijan (Abedi, et al. 2014: 49, 149). From Kura-Araxes layers at Kul Tepe also a cylinder seal was documents (Abedi 1393/2015). The considerable number of administrative technologies at Köhne Shahar most likely indicate some degree of labor specialization and specialized production.[26]

[26] About the role of storage facilities in pre-industrial and early complex societies see D'Altroy and Earle 1985, Hunt 1987, and Polanyi 1971

Since the workshops in these trenches are all from the fourth occupational phase and its subphase (formerly phase 5), it is possible that the craft production was conducted at a community-level. Results of our magnetometery survey also revealed strong magnetic anomalies in each "neighborhood" of the citadel. The highest magnetic anomalies are seen near the fortification wall to the north of the citadel, with smaller magnetic anomalies being more widely distributed. These high magnetic anomalies most likely represent either kilns or deposits representing midden associated with pyrotechnological activities.[27]

Earlier surveys suggested that the site has a fortification wall with towers that separates a densely populated citadel or inner town from a more sparsely settled extramural area or outer town. Excavations in trench 10G5 (10×10m) out of the citadel and beyond its northwestern corner revealed that our earlier assumptions were correct. In addition, our preliminary analyses of ceramic typology did not show any difference between ceramics recovered from 10G5 and other trenches in the citadel.

Although a test trench for stratigraphy is needed in outer town to assess occupational sequence out of the citadel in the future, excavations in trench 10G5 suggest that at least two occupational phases exist in outer town. In other words, I assume that the upper occupational phase documented in trench 10G5, especially in S601, is contemporaneous with others uncovered structures from horizontal excavations in the citadel.

The discovery of two occupational phases in trench 10G5 suggests that occupational segregation at Köhne Shahar was long lasting and continuous. Occupational segregation at the site primarily indicates that there was at least a physical division within the community lived at

[27] Mohammadkhani, personal communication.

Köhne Shahar. Although the nature of the segregation and division need further analysis and investigations, it apparently suggests that a group of people lived outside of the walled area, the citadel, and were vulnerable for any threat while the other group remained inside of the walled area and well protected.

Chapter 5. Discussions: Results of Investigation at Köhne Shahar

In this chapter I will address and summarize data collected from three seasons of excavations and discuss them with regard to their social contexts and implications. Particular emphasis will be placed on the evidence and indicators that could be related to social ordering and any of the forms and dimensions of social inequality. Finally, relying on the analyses conducted in this study, I will attempt to propose a general picture of social composition of the KACC at Köhne Shahar with its possible hierarchical and heterarchical ordering.

Aside from the fortification wall and the citadel, the settlement contains many other important features such as a central plaza with radiating alleyways, a large and elaborate stone platform on the northern edge of the plaza, and several workshop units with associated evidence of administrative technology and storage facilities. The excavations also revealed elaborate burial structures in the site's cemetery. Our understanding of these features is still limited. However, it can be said unequivocally that these features are not common to most Kura-Araxes settlements. Overall, the results agree with those of earlier scholars who have suggested that Köhne Shahar is a special Kura-Araxes settlement (Kohl 2009b: 250).

5.1. Stratigraphic and Chronological Summary

Stratigraphy in the sounding (TT1) revealed a fairly high quality of stratified cultural remains. The sounding near the fortification wall in the north of the citadel resulted in the exposure of a series of clearly defined occupation phases that span the late fourth/early third

millennium BC to its latest centuries, namely Kura-Araxes phases II and III. These occupation phases are characterized by well-preserved stone architecture, and contain assemblages of cultural material without any mixing of residual remains. Generally, the stratigraphy in TT1 shows some slight changes in architecture and ceramic typology. This sounding was small, however, and the results presented in the earlier chapter should be considered as preliminary for that reason. In future excavations, more soundings in both the citadel and outer town are necessary. This undertaking is essential for a better and overall understanding of the formation of the site, especially its initial settlement.

The five phases of occupation in the citadel are each characterized by substantial walls of stone preserved to a considerable height. Alignments of structures in each successive phase are different from one another. However, the ceramic assemblages associated with these phases are relatively consistent. This observation is important because despite a continuity in Kura-Araxes materials from the first to the last phase, each architectural phase also represents a distinct period of occupation of unknown duration. No sequential gap between any of the phases can be detected, and there is no evidence to suggest that the site was abandoned between each of these phases. Radiocarbon samples were taken from each of these phases, although they are yet to be analyzed.

The lowest phase in the citadel is characterized by a fortification wall with its associated occupation layers. Typology of ceramics from this phase suggests that initial occupation of the site occurred sometime in early third millennium BC, if not earlier. It seems that the construction of the fortification wall became necessary from the initial occupation of the site. Threats and conflict may, therefore, have existed even before the occupation of the site so that construction of the wall coincided with or even preceded the occupation of the citadel. This

construction sequence is significant especially with regard to the managerial aspect of the construction of the wall, which represented a significant investment of labor. It is also noteworthy with regard to the organization of the occupation itself, and the coordination of people before and during the process of the occupation. It is hard to imagine occupation of a place by a group of people without any earlier plan and organization.

The structural remains in phase 2 are almost unknown since only a little face of a stone structure was identified in the southeastern corner of the trench. It is difficult, therefore, to provide clear suggestions about the nature of this stone structure. However, associated layers with Kura-Araxes ceramics and floor surfaces within the deposits suggest that this phase was an occupational phase subsequent to the first phase. Kura-Araxes style ceramics of phase 1 continued to phase 2.

As can be seen in the section (Fig. 11) and plan (Fig. 13), phase 3 provided abundant data on architecture, ceramics, and other materials. There is no evidence of an abandonment between phases 2 and 3. A portion of a circular building preserved to the height of 70cm made of cobblestones with associated floor surfaces provides a good picture of occupation in this phase. Ceramics with dimple-and-groove decorations (Fig. 21:3) similar to Karaz type of ceramics suggest that this structural phase can be dated to Kura Araxes II.

The materials from phases 4 and 5 in TT1 might be better studied through large trenches in the citadel since the materials of those trenches mostly represent the 4^{th} and 5^{th} phases in stratigraphy. Although the structure of phase 4 does not follow the alignment of phase 3, there is no evidence of an occupational gap. Incised decorations are one of the characteristics of Kura-Araxes III phase (see Sagona 1984: 102-103) along with small decorative Nakhichevan lugs,

which only appear in the last two phases at the site (L107 and after). These ceramics confirm that the last two phases of the site correspond with Kura-Araxes III.

Given the chronologies of Kura-Araxes II and III (Glumac and Anthony 1992; Palumbi 2008b; Gopnik and Rothman 2011; Sagona 1984: 125-126; 2000a)[28] our small ceramic collection from stratigraphy suggests that the site could have been occupied sometime between the very end of the fourth/beginning of the third millennium and mid to second half of the third millennium BC. Despite its small horizontal exposure, the stratigraphic sequence that has thus far been revealed in TT1 at Köhne Shahar is significant for our understanding of the formation of the site, archaeology of Chaldran, and also that of northwest Iran as a whole.

5.2. Fortification Wall and Conflict

Fortification wall is relevant to my argument on social inequality in two ways; first because of social processes behind its construction, second, because of social consequences of its construction. Here I will argue how probing the social processes behind its construction and its social consequences may help us get some ideas about the social structure and organization of the community at Köhne Shahar.

Excavations at Köhne Shahar so far have not yielded any evidence of actual conflict. However, the promontory, which is located 20m above the valley floor, provides natural defense from two sides, while allowing for a panoramic view of the surrounding areas. The site's

[28] Also for chronologies of Ninevite V in northern Mesopotamia see Grossman 2014: 88-89; Rothman 2001; Schwartz 1985

residents had also invested in the construction of a monumental fortification wall. To complement these natural defenses, they built the wall on the most vulnerable (northern) side of the citadel. The presence of the wall and its round towers, its specific location, and the amount of energy invested in its construction all suggest the defensive/militaristic aspect of the wall and that the occupants of the site were apprehensive of potential military incursions. Therefore, the citadel should have been equally protected from all three sides, and so the fortification wall was intended to add depth to its natural defenses. Fortification walls have a long history in the Near East and probably started to appear much earlier than the Early Bronze Age (see i.e. Mazar 1995) but became more common by the middle of the 3rd millennium BC and appearance of fortified urban-sized settlements (Schwartz 1985: 45).

The wall's construction in the earliest occupational phase suggests that siege was a well-known military tactic (see i.e. Turney-High 1991; 1981), and that the wall's construction was a preemptive response to possible incursions. Space is very crucial in a siege, and so by selecting the promontory's location for residence, the site's occupants had strategically created a confined space for attackers (Watson 1993: xi). Eph'al (1983: 91-92) argues that in general siege was a preferred tactic over physical confrontation. In the case of static and longer-term confrontations, fortification walls lower the attackers' maneuvering abilities and possible tactical superiority.

Although walls around the settlements could serve a variety of purposes (Connah 2000: 36; McIntosh and McIntosh 1993: 632), our surveys and surface observations suggested that several protruding towers along the fortification wall certainly emphasize the defensive/militaristic aspect of the wall at Köhne Shahar. It is argued that in general siege was preferred over the physical battle. Aside from protecting people and their possessions inside of

the walled area the fortification wall also functioned as a strong physical barrier to restrict access for both insiders to outside and outsiders to the inside of the citadel.

The contemporaneity of the wall with the first occupational phase of the citadel suggests that initial occupation of the site was deliberately planned. However, the fortification wall also indicates that they were afraid of something, most likely locals. In other words, the formation of the site itself is intertwined with reasons behind the construction of the wall. Thus, applying a functional-adaptive approach may not be so helpful to explain site formation and social dynamics at this settlement.[29] Moreover, this contemporaneity strongly indicates that concern for external conflict preceded the construction of the fortification wall. The fortification wall was used during all occupation phases, possibly spanning a few centuries. The threat of warfare must have existed throughout the entire occupation of the site. The identity of potential rivals in this area is unknown, and causes and consequences of potential conflict at Köhne Shahar have yet to be analyzed.

Fortifications can have both symbolic and defensive/militaristic significance. As stated above, fortification walls are better indicators of the *potential* for conflict rather than direct evidence of warfare. Additional lines of evidence, such as selection of naturally defensible areas for settlement, evidence for population aggregation in such areas, and adoption and invention of new types of weaponry,[30] may reflect communal response to potential external threats (Maisels 2010: 25). The strength of the town could also been demonstrated to rivals and neighboring

[29] Here I use Giddens's (1984: 233-234) simple definition of adaptation; "the gamut of processes whereby human beings respond to and modify features of their physical environment."
[30] Such as a mace-head fragment and an obsidian arrow head found in large exposures. See Alizadeh et al. forthcoming

communities by fortification walls and other forms of labor-intensive architecture (Smith 2003: 282).

The main tactical function of a fortification is to protect the defenders. They are constructed to protect people, properties, and livestock (Keeley 1996: 56). Moreover, "fortifications predict warfare" (Otterbein 2004: 18). Indeed not all walls indicate the existence of warfare. They are also built to physically secure sites, to divert floodwater away from residential areas, and to block winds (Otterbein 2004: 190-191; see i.e. Bar-Yosef 1986). Walls can also prevent thieves from stealing portable possessions. However, given the aforementioned features of the wall, the primary purpose of the wall at Köhne Shahar was defensive.

Fortification walls may also symbolize prosperity and permanence of a settlement. Therefore, its destruction by the enemy also bears symbolic significance. Numerous claims of destruction of city walls in royal texts and reliefs of ancient Mesopotamia highlight this symbolic aspect (Otterbein 2004: 190; see also Eph'al 1983). The fortifications "at the most prosaic level, symbolize their owner's military sophistication, military power, and determination to hold occupied territory" (Keeley 1996: 57; see also Liston and Tuggle 2006: 165).

It is important to address the questions of who built that fortification wall and the social processes behind its construction because of its implications for the social organization of the community. Who constructed the wall and under what condition? Was it top-down imposition of a leadership or did it represent a bottom-up social process? Was constructed cooperatively by collective action?

Warfare was common in the human past (Keeley 1996: 25-26). However, not all settlements were protected by defensive works. While warfare does not necessarily lead to the

construction of fortification walls, the presence of a wall indicates continuity in or high frequency of warfare, or at least the presence of a genuine threat of conflict. Defensive mechanisms were common among early polities that aimed at securing the communal benefits against attack from outsiders (Roscoe 2013: 59).

The construction of stonework architecture such as the massive fortification wall at Köhne Shahar required a large labor investment, which in turn, highlights a cooperative organization of labor and coordination (Pollock, et al. 1996: 689). Cross-cultural analyses suggest a correlation between the frequency of warfare and the construction of fortification walls (Otterbein 2004: 192-193). According to Allen and Arkush (2006: 7), "middle-range societies that fortify their settlements may find it extremely difficult to conquer one another, because such societies commonly lack the logistical infrastructure to set prolonged sieges or the military control to storm forts effectively. However, fortifications tend to become less effective as polities develop large, mobile armies and techniques for rapid expansion."

Warfare is an important aspect of the development of social complexity. Some scholars underscore the role of warfare as a significant factor in the emergence of complex chiefdoms and states (Carneiro 1970; 1981; Earle 1997; Roscoe 2013; Schroeder 2006). Intergroup conflicts had a key role in preparing ground needed for intragroup cooperation which in turn enhanced levels of cohesion, cooperation, and development of collective identity, especially in males (Van Vugt, et al. 2007; Van Vugt and Hart 2004).

Once the fortification wall was constructed, it was also necessary to maintain, repair, and possibly expand it. The continual use of the wall throughout all occupational phases of the citadel at Köhne Shahar suggest that even its maintenance and possible repair also could have required a highly collaborative and communal cooperation. Likewise, the control and regulation

of the flow of traffic through gateway(s) also were of significance and required constant coordination beyond communal cooperation. It is necessary to note that in the time of defense and war, coordination requires more than the desire and willingness of the members of the community at Köhne Shahar to cooperate. It should be noted that by increase of population and its expansion in outer town, leader's role also should have become more complex, numerous, and "leader-centered direction of group activities" probably were more tolerated (see Hemphill 1950).

The same communal attitude would have been important in battlefield cooperation and strategizing during times of conflict. This, in turn, may have given rise to a central leadership, "big-man", or "headman" position (Sahlins 1963; Hayden 2001; 1995; Hayden and Gargett 1990; Stanish 2009)—if it had not already emerged.[31] In these kinds of communal projects, leaders may first appear as coordinators and monitors of participation of the members of the community. After a while, they may use different mechanisms such as persuasion,[32] and devise 'leadership packages' that may impose rank or status differentiation.[33]

Monica L. Smith (2003: 273) notes that "when only limited resources are available for infrastructure, one-time labor inputs such as monumental architecture and fortification walls suffice to make a long-standing statement of central authority." Some scholars argue that early

[31] Although the fortification wall demonstrate a long span of use and indicates the frequent and continual warfare, it may not necessariliy imply the permanance of possible leadership position or institutionalization of leadership (see Stanish 2009 for institutionalization of leadership).
[32] Joseph S. Nye developed the concept of "soft power" namely the ability to persuade, attract, and co-opt to explain situations that "hard power" such as coercion is not used. This concept is now widely used in politics and other social sciences (see Nye 2004, 2008)
[33] In regard with the leadership position, it is necessary to distinct between the *purpose* and *function* of elites that was proposed by Flannery (1968). Since it is also possible that the leadership position appeard before the occupation of the site and may have preceeded its first occupation phase, it is hard to tell whether the rise of leadership position at Köhne Shahar was originated from its necessity (functional perspective) or it was caused by its development from ambitions of an aggrandizer.

forms of institutionalized leadership might have developed from risk management, problem-solving, and dispute resolution within the community (Carballo 2013: 18).[34]

Fortifications have appeared among most centralized polities, where they may symbolize and manifest the importance of leaders' exclusive access to power (Keeley 1996: 26; Otterbein 2004: 189-193). Both pristine and secondary states constructed fortification walls. In the case of pristine states, the state may have preceded fortification and warfare. In the case of secondary states, war and fortification preceded the rise of political complexity (Otterbein 2004; 2010). For example, it is argued that even those villages engaged with fortifications emerged as middle-range societies (Griffiths 1973; cited in Otterbein 2004: 192).

In the pre-industrial world, with a few exceptions, almost all state-level societies constructed fortifications. However, fortifications were also common in non-state societies. Construction of fortifications necessitated certain community-level preconditions, since they were probably among the costliest and largest military technologies of the pre-industrial world. In these societies, "because of the large input of labor necessary to construct even the simplest log palisade around a small settlement, the requisite labor can seldom be mustered for the whole period of construction by very egalitarian societies whose leaders have little power" (Keeley 1996: 55).

Therefore, investment in such costly projects is not expected for transhumant pastoralists with their mobile settlement strategies and portable possessions. Furthermore, small-scale egalitarian societies such as bands and tribes do not have the social dynamics and economic

[34] Studies in evolutionary psychology also suggest that solving social coordination problems such as intragroup peacekeeping and intergroup conflict could have given rise to development of strategies of leading and following (Van Vugt 2006; Van Vugt, et al. 2008) since collective responses to threat is also "addressing identity-expressive concerns" (see Ellemers et al. 2002: 179).

infrastructure that can support large-scale communal projects like defensive walls. These societies may also experience threat levels that are not high enough to justify the cost of such projects (Keeley 1996: 58). Attackers are instead attracted to demographically dense sedentary communities that are loci of wealth concentration, rather than smaller ephemeral hamlets or villages. Therefore, such large-scale and expensive communal projects are more reasonably associated with larger settlements with regionally centralized roles (Keeley 1996: 55-56).

Since protection and security were primary concerns of the occupants of Köhne Shahar and likewise these concerns played a major role even in formation of the settlement, coordination in time of defense or conflict (internal or external) was at the core of social organization of the community lived at Köhne Shahar. In time of war, they could not be successful in their attempt unless one of them as manager or headman coordinated efforts of cooperators. "Political power can be based *directly* in successful coordination of many people. Such coordination may sensibly be called a form of power" (Hardin 1990: 367). In this sense, relationships of mutual defense causes relationships of power which relies on "the ability of individuals to render one another defensive aid" (Roscoe 2013: 68).

An aggregation of inhabitants for defense in time of war or potential threat would undoubtedly have been subject to coordination by a chiefly leadership. Thus, the defensive/militaristic aspect of the fortification wall further emphasizes the necessity of coordination that is different from cooperative undertakings (i.e. see Carballo 2013: 11; Spencer 2013: 197-198; Chwe 2001). Although theoretically human groups can function without a leader, however, it seems that the role of a leader is one of the first to emerge. Most people prefer being led over staying leaderless (see Berkowitz 1954; Hogan and Kaiser 2005).

Particularly in a time of intragroup or intergroup problems the need for a leader become stronger (Forsyth 2010: 248-249).

The construction of large monumental structures is possible communally and without the need for social or political hierarchy. Small-scale societies may have leveling mechanisms that resist the development of hierarchy and political rank (i.e. see Boehm 1993; Eerkens, et al. 2009; Kantner 2009; Flannery and Marcus 2012: 19-37; Trigger 1990). In these societies cooperation is predominant compared to competition. Cooperation is one of the most important organizing elements of social groups and it is undertaken within multiple scales of social interaction (Carballo, et al. 2014; Carballo 2013). Following Margaret Mead (1937: 8) cooperation is defined here broadly as "the act of working together to one end." Shared interests and mutual benefits lead to group formation and provide sufficient rationality to cooperate (Olson 1971).

There is even some evidence that suggests smaller-scale societies could cooperatively manage large-scale projects.[35] Some hamlets or villages may even build palisades for defensive purposes (i.e. see Johnson and Earle 2000: 124, 126, 132-133; Keeley 1996: 56-57; Otterbein 2004: 189-194). However, these instances are rare and refer to projects on a smaller scale than those in middle-range and state-level societies.

[35] For instance, in the Andes, the *ayllu* kin-based form of social organization, along with other mechanisms such as *mit'a* ('turn of labor and the equal exchange of work), and *chuta* (taking turn based on communal cooperation), could participate in such large-scale and ambitious projects such as consruction of fortification walls, irrigation canals, ditches or terraces (see Kaufmann and Kaufmann 2006; Morris and Hagen 2011; Moseley 2001: 53-56) or community projects in central Mexico (see Carballo 2013b). Another example could be the *karez/qanat* and irrigation canal systems that were common in rural areas of Iran, which were constructed and mainteind cooperatively (see i.e. Kramer 1982: 266).

If we assume that the fortification wall at Köhne Shahar was constructed cooperatively in the first occupation of the site and maintained over a few centuries by communal cooperative mechanisms, still we need to ask "cooperation of whom?" Under what condition did cooperation take place? Is it legitimate to ask who benefited from communal cooperation in constructing and maintaining the fortification wall? What were the benefits of participating in this cooperative endeavor to individuals across the community, particularly to those who lived in outer town? What mechanisms for encouraging and maintaining cooperation did exist within the community?

Occupation in both sides of the fortification wall was continuous and the wall actually divided inhabitants spatially into two groups: people who lived and worked inside of the walled area and people who lived and worked in outer town. If the fortification wall was constructed and maintained by a collective action then it implies that the collective action should have been taken by people who lived inside of the citadel or by people of both sides or only by outsiders.

People who lived inside of the citadel already enjoyed greater security and were well protected by living in a palisade with a naturally defensible location. Also a fortification wall had added more depth to its defensive mechanism from the northern side of it. Thus, living in the citadel was more desirable than living in the outer town. In other words, people who lived inside of the citadel enjoyed unequal access to security and protection.

If the construction of the fortification wall was a cooperative undertaking then it must have been a public good.[36] The benefits of a public good must be available to all, cannot be excluded, and yield is not subtractable (see Olson 1971: 28; Hardin 1982: 17-20; Ostrom and

[36] As Alchian and Allen (1983: 99) put it: "a public good is one which is capable of being used by many persons at the same time without reducing the amount available for any other person."

Gardner 1993: 93). Public good has two major characteristics: "jointness of supply and impossibility of exclusion" (Hardin 1982: 17).

The construction of the fortification wall at Köhne Shahar could not be a public good since it benefited only people who lived within the citadel with security and protection, and excluded those who lived in outer town from those benefits. Some were left vulnerable if the protection of people and properties was necessary. The construction and especially the maintenance of the wall were costly. Everyone should have paid the costs of construction and maintenance. The construction of the wall was costly without any benefits for the people of the outer town. Then we need to think about whether the exclusion was backed by something such as property rights, legitimacy, ideology, power etc. (see i.e. Ostrom, et al. 1994: 6). This suggests that the wall was constructed either by only people who lived inside of the citadel or by both groups of people to secure insiders.

In the latter case, it means that people living outside of the citadel contributed in construction of the wall without benefiting from its construction. How could insiders exclude outsiders from the security and protection but get them to collaborate in the construction of the wall? If this is the case, it implies that even if the wall was constructed collectively, it was built by a group of people who lived inside of the citadel and had access to greater power that enabled them to exclude the others, the outsiders. Thus, insiders hold an exclusive ownership right and its value depended "on the cost of enforcing [that] right – that is, the cost of excluding others, which ultimately depends on coercion" (Eggertsson 1990: 35).

Group formation and communal cooperation are difficult to achieve. There is a dilemma[37] in communal cooperation since it might be threatened by the rational, self-interested, self-centered, and selfish behavior of individuals. Communal cooperation is difficult to achieve because it also depends on multiple and potentially conflicting rationalities of group members that intersect in complex ways (Blanton and Fargher 2008: 13-14; Hardin 1982: 2-3).

Even if the fortification wall at Köhne Shahar could have been constructed cooperatively, its defensive/militaristic aspect and its long-term maintenance necessitated a certain degree of coordination and control embodied by some level of political hierarchy. In addition, other features such as workshop units, administrative technologies, and other evidence also support my argument and suggest that Köhne Shahar was a particularly complex Kura-Araxes settlement (see below).

These arguments were all based only on possible causes and reasons behind the construction of the fortification wall and demonstrated that there were several indicators that point to the existence of a political hierarchy. However, when it comes to the possible consequences of the construction of the wall, we find more indicators supporting my arguments. There should have been some possible (intended or unintended) social consequences of the construction of the fortification wall in outside of the citadel. Social consequences of the construction of the wall is relevant to my argument since one of the major consequences was spatial and residential segregation of the community at Köhne Shahar. I will discuss the consequences of residential segregation more in the last part of this chapter.

[37] Known as Hobbes's dilemma or Free-Rider problem (see Feinman 2013: 301; Hardin 1995: 38; Blanton and Fargher 2008: 6; Pasour 1981; Eerkens 2013).

5.3. Craft Production and Specialization[38]

In addition to social inequality, specialized craft production and the division of labor are key factors in the economies of complex societies, as they fostered and accompanied the development of socio-political complexity (Childe 1942; Clark and Parry 1990; Hruby and Flad 2007; Lamberg-Karlovsky 2015; Stein 1996; Wailes 1996). Craft specialization as part of occupational specialization (Rice 1991: 258-259) is often linked to the emergence of chiefdoms, and state-level societies (Cross 1993), and is considered either a cause or a consequence of the development of social complexity (Earle 2002; Stark 1991). However, research on the KACC has not demonstrated any evidence of political structure akin to chiefdom or state-level models of political organization so far.

Lack of political hierarchy, the small ephemeral nature of the early sites, and the fact that the material remains of KACC do not fit the Caucasian Iron Age and Mesopotamian models of social complexity, have all created a vacuum in our understanding of socioeconomic and political developments in the greater Caucasus in the periods between the introduction of agriculture and the emergence of the polities of the Late Bronze Age and the Early Iron Age.

Nevertheless, current research at Köhne Shahar suggests the existence of both political power and specialized production. Analysis of the fortification wall demonstrated that some type of leadership must have already existed from the earliest occupation phase at the site. I have

[38] Here for the definition of specialization I use what Alchian and Allen (1983: 135) simply put: "specialization of production (or what is also called "division of labor"), wherein people produce some goods that they sell to others in exchange for the goods they want to consume." For definition of specialization see also Cross 1993: 65; Cobb 1996

argued that actual and potential conflict must have led to or fostered the development of leadership position at the time of the site's first occupation.

Although interpretation of evidence of workshops is often difficult, a combination of them can make interpretations easier. Fixed installations such as benches (as seen as F.13 in S502 in trench 12H25), pyrotechnological installations (as seen in trenches 13I5, 12J21, and 12H25), half-finished artifacts (such as the many stone beads found in workshop units), and stone implements are of great significance (Matthews 1995: 459). Except in the stratigraphic trench (TT1), architectural spaces for manufacturing activities and production or architectures related to production were uncovered in all large trenches around the citadel's central plaza. All these production units were in use during the 4th occupation phase.

There are a number of archaeological indicators[39] at Köhne Shahar that point to craft production in the citadel. These findings consist of pyrotechnological installations, nut-sized fragments of slag, crucibles and their sherds, tuyères, anvil stones, flat and round-ended pestles, hammer stones and pounders/grinders, many bone tools, numerous finished and unfinished stone beads, ore fragments, and thick homogeneous ash deposits and waste materials accumulated in associated architectural spaces near production units. Together, these findings are unambiguous and direct evidence for on-site production, although I do not yet know the whole range of commodities that were exactly manufactured in these production units. Not many finished objects were recovered from these workshop units. However, this circumstance is not surprising because products were supposed to be traded off. Overall, the evidence of concentration of workshop activities in the citadel is abundant.

[39] Tosi (1984: 25) classifies archaeological indicators for craft production in the six classes such as facilities, tools for manufacture, residues, semifinished products, stocked and unworn products, and materials for recycling.

Excavation recovered evidence of production in all citadel trenches, which indicates that three "physically" neighborhoods around the central plaza there was a concentration of production activities. Of course this does not mean that all buildings were solely dedicated to production. Probably some of the buildings were residential, such as S102 in trench 13J1, S203 and S204 in trench 13I5, and S601 in trench 10G5. Excavations outside of the citadel in trench 10G5 did not provide any clear evidence of manufacturing activities or production units, although many stone implements similar to those found in the citadel workshop units were also recovered. Excavations outside of the citadel were, however, very limited compared to excavations in the citadel.

Magnetometery survey also revealed strong magnetic anomalies in each neighborhood of the citadel (Alizadeh, et al. forthcoming). The highest magnetic anomalies are seen near the fortification wall at the north end of the citadel, with smaller magnetic anomalies being more widely distributed. These high magnetic anomalies most likely represent either kilns or midden associated with pyrotechnological activities. Thus, it is highly likely that craft production at Köhne Shahar was practiced in a community-level and during three seasons of excavations we have only uncovered a small portion of production units in the citadel. Specialized craft production is such a multidimensional phenomenon that each of its dimensions needs to be addressed carefully. However, we can address few of them here that have empirical support.

Although our excavations outside of the citadel were limited, inhabitants outside of the citadel appear not to have been involved with craft production at the same level that insiders were. Nevertheless, craft production was practiced in community level at least inside of the citadel if not the whole settlement. In addition, the continuous nature of the manufacturing process in the citadel also points to a specialized level of production in a sense that people were

producing continuously so that sets forth the possibility of full-time craftsmen. Hence, there might have been both site specialization and producer specialization (Stark 1991: 73; Muller 1984; Rice 1991: 262-263).

Evidence of craft production at Köhne Shahar prompts the question of whether it had any possible causal relation with aspects of social complexity such as social inequality. One may wonder whether specialized craft production at Köhne Shahar was developed from a bottom-up social process or it was a top-down imposition and represents a plan developed by a central political authority. In the following paragraphs I will try to analyze and discuss these possibilities.

In middle-range societies, one of the major concerns of political leaders was devising means to maintain status. Durability and sustenance of status was directly related to the process by which leaders could gain power and maintain control over labor. These processes included warfare, ceremonial events, feasting, intensive food production, and control over craft specialization. Regarding the latter, it is argued that in order to increase and maintain social status, a leader or a ruling elite may strategically employ and manage specialized craft production (Arnold 1993; 2009: 122; Brumfiel and Earle 1987: 3; Costin 2004; Earle 1991a; 1999; Hayden 1995; 1996; 2001; Stein 1996: 25; 1998; Vaughn 2009: 149). Controlling the means of production would could have inherently led to the creation and institutionalization of social inequality. In a variety of ways they also elites sought to demonstrate their authority and in this regard "the installation of fortifications and gateways as a focal points of community labor" were only two of them (Smith 2003: 279-280).

Emphasizing the critical ties between warfare, ideology, and control over the economy, Timothy Earl argues that control through warfare could be extended to control over the

subsistence economy (Earle 1997: 142; see also Johnson and Earle 2000: 252). Such economies are best explained by a supply-on-command model rather than a supply-and-demand. The latter is most concerned with consumer societies or market-based economies in which supply-and-demand organize or regulate production and exchange (La Lone 1982).

One of the important aspect of controlling craft production is management of the means of (re)distribution of finished goods. To Elman Service (1962) the emergence of chiefs is tied to the management of regional redistributive economies. In order to get the products to consumers, they must have needed a peaceful climate and a safe network of exchange system (Sanders 1956; 1974: 122). In other words, an exchange system is highly dependent upon regional peace, which in turn provides a good ground for interdependency between societies. Societies do not live in isolation. Their interactions with one another involve the preservation of mutual interests, even in egalitarian societies (Spielmann 1986). Therefore, despite conflict with rivals, exchange routes should have been secured by elites which were critical for trading of finished goods.

Exchange networks and supply could have been another venue through which leaders maintained status and perpetuated social inequality in their communities (Carneiro 1970; 1981; Cobb 1993: 60-65; Johnson and Earle 2000: 31-32; Trigger 2003: 342; Earle and Ericson 1977; Ericson and Earle 1982; Helms 1993; Fukuyama 2011: 85; Adams 1992; Polanyi, et al. 1957; Rathje 1971; Wright and Johnson 1975). Evidence of bitumen as raw material at Köhne Shahar and probably originated from northern Mesopotamian or Zagros sources could have been one of those items, and it suggests long-distance trade. Interesting fact about the ceramics is that there are many fragments, which contain remnants of a bitumen-like black substance on and around old fractures, used to fix and repair broken vessels. Bitumen as an adhesive and waterproofing agent has been recorded in many archaeological and ethnographic cases in the Near East

(Connan 1999; Connan and Deschesne 1995; Marschner, et al. 1978; Schwartz and Hollander 2000; Schwartz, et al. 1999). The closest sources of bitumen to Köhne Shahar could be Siirt in southeastern Anatolia, or Mosul in northern Mesopotamia (Connan and Van de Velde 2010).

Another and very interesting object that suggest long-distance trade or interaction is an elegantly manufactured tiny container made of bone/ivory that seemed special object compared to others (Fig. 67). Both container and its cap are decorated by many carved dot-in-circle designs, six dot-in-circles in the bottom, six dot-in-circles on the cap, and many on it is body. I have found no parallel of this small container in Kura-Araxes settlements. However, both the shape and decoration (concentric circles and dot-in-circle) find very interesting parallels on stone containers and other objects from the 3rd and early 2nd millennium BC settlements in Persian Gulf region, eastern, and southeastern Iran, and even Central Asia (see David 1996; 2002; Potts 2008; Read and Searight 2001).

From a substantivist perspective, the economy was intertwined with social structure, or was socially "embedded" (Polanyi 1957). A political leader's involvement with the modes and means of craft production could entail regulation and control of exchange systems, as a result of which production could become profoundly affected by power and domination. Under such circumstances, the flow of commodities would be determined by the nature of political power, and thus power-oriented rather than demand-oriented (Earle 2002: 96; Zafirovski 2001: 96).

An exchange system is defined, in part, by point(s) of production and point(s) of consumption. Producers and consumers of craft goods of Köhne Shahar were not necessarily the same. At some level, craft goods could have met the producers' needs, and they could have utilized their own products as well. It should be noted that our excavations so far have not exposed any major evidence of a consumer cohort.

Therefore, it is possible that produced goods from Köhne Shahar could have been consumed as far south as Mesopotamian or Zagros regions. A certain degree of political power controlled finished goods so that craft production at Köhne Shahar could have been a *specialized* and probably production was *administered* by political power (Sinopoli 1988) or producers were *attached* to political power (Clark and Parry 1990: 297-298). In addition, the presence of different workshop units adjacent to one another, lack of any considerable evidence of consumption implies the presence of a specialized form of production (Lewis 1996: 381). The need for political management of these workshop units is further attested by elements of administrative technologies found in the workshop contexts.

Another important variable is the availability of resources, which is directly related to the supply and demand of specific items and could play an important role in social context of production and power relations. Scarcity is universal, pervasive and it simply means that "people want more goods and services than are available" (Alchian and Allen 1983: 2). Scarcity in resources has also driven leaders and ruling elites to competition, conflict, and control at various social and geographic scales (Alchian and Allen 1983: 10).

The smooth operations of possible multiple specialized workshop units at the site would have necessitated a certain degree of political complexity. I suggest that Köhne Shahar was most likely a primary center of specialized craft production, with primary consumption taking place on other communities on the landscape. The presence of bitumen and ceramics similar to Level V at Nineveh at Köhne Shahar suggest possible contact with northern Mesopotamia.[40]

[40] The distance between Köhne Shahar and Ninevite V sites in Northern Mesopotamia is only a few hundred kilometers i.e. to Tell Gawra is about 300km and is about 430km to Tell Raqa'i or about 400km to Tell Brak.

One may argue that specialized craft production could also be a cooperative undertaking without a political power involvement. The critical question is how do we know if the specialized craft production was not a cooperative undertaking without involvement of any political power? Here I would like to discuss the extent to which specialized craft production could have been a cooperative undertaking rather than a politically controlled or administered.

Unlike building a fortification wall or any defensive mechanism that confer a public goods and benefit to all inhabitants, whether they cooperated in the construction or not, collective activities in economy can easily exclude non-participators from the benefits (Carballo 2013: 10). In this sense, the nature of benefits in cooperative craft production at Köhne Shahar differed from benefits in cooperation in the construction and maintenance of the fortification wall. Although in a cooperative craft production participators may have received a share if everything was intended for a redistributive economic system, but because of excludability and subtractability, and considering the possibility of cooperation dilemmas, benefits of cooperation in craft production were not necessarily redistributed among participators. Even if it was, benefits may not necessarily be redistributed equally among cooperators. This is more likely in cases where there is a scarcity of resources involved in craft production. These conditions make the cooperation in craft production more difficult to achieve compared to cooperation in defense and building a fortification wall (Ostrom and Gardner 1993: 93; Carballo 2013: 10).

In small-scale societies, producers did not necessarily have control over all the means of production. We cannot understand the process and social context of production fully without considering its dynamic relations with exchange and resource procurement and how these are tied with power relations (Cobb 1996: 262). Aside from craft production and its social organization, resource procurement and disbursement of artifacts also were very significant.

Resource procurement strategies[41] most likely involved a different groups of people other than producers working in the citadel and a different set of mechanisms other than that of involved with production processes. In addition, disbursement and trading off the finished goods also required a network of exchange and security of routes to get the goods to consumers which required also different mechanisms and social relations. Considering the fact that all these had to take place at Köhne Shahar in a situation under threat and insecurity suggests that a central coordination and control was necessary for cooperative craft production at Köhne Shahar.

Because of a limited data at disposal, I am unable to expand my analyses to consider detailed relations of craft specialization. In addition to cooperation dilemmas and relations of production, there is also one line of evidence that may shed more light on social context of craft production and may integrate it with processes of social control over the economic system. Administrative technologies as material expressions of control and record-keeping recovered in the context of production units were highly significant in this regard (see next section).

These interpretations are more than anything working hypotheses for future research on the site. I do not rule out other possible explanations of the development of specialized craft production at Köhne Shahar. It is most likely that a number of different variables were responsible for its development. If the development of the craft production was not affected by political complexity (or a top-down imposition), we need to think about other variables that might have contributed to a bottom-up social processes responsible for the development of the craft production at Köhne Shahar.

[41] Written record from Old Akkadian period from Temple of Enlil indicates that control of valuable materials was the most important concern of overseers and officials. For instance, officials used to weight gold before it is released to goldsmiths to be made into product and then weighed and checked again (Matthews 1995: 464).

In addition to the possibility of a top-down imposition, we also need to take environmental and demographic circumstances into consideration. Köhne Shahar is located in a narrow valley, surrounded by patchy high mountains to the east, and high pastures to the west. In addition, the immediate surrounding area of the site in the valley of Qızlar Chay is predominantly basaltic lava, which may not be fertile enough for agricultural intensification. At the moment I lack a quantitative understanding of the relationship between land use productivity and demographic factors at Köhne Shahar. Inhabitants at Köhne Shahar might have suffered from insufficient land or not fertile land for agricultural intensification which could be another possible factor that might have driven the community to specialized craft production.

Ethnographic studies indicate that there is a dynamic relationship between intensification of agriculture and the division of labor in specialization of craft production e.g., (Dow 1985: 149). These studies have demonstrated that craft specialization can become common among those communities that are engaged with intensification of agriculture but have excess labor and suffer from shortages of land (Stark 1991: 72). Although many archaeologists and anthropologists consider a causal relationship between craft specialization and the emergence of social complexity (Brumfiel and Earle 1987; Chapman 1996; Clark and Parry 1990; Costin 1991; 2001; Earle 2002; Hruby and Flad 2007; Peregrine 1991; Stein 1996), reviewing major models which address the causes and consequences of craft specialization (see i.e. Earle 2002) Miriam T. Stark states that ultimately the outcome is the same: "specialization accompanies the development of political complexity" (Stark 1991: 72).

Data from all excavation seasons further suggests that Köhne Shahar was as specialized craft production settlement and points to the existence of multiple craft production units, probably not centralized but centrally controlled. Therefore, management of multiple craft

production units would have necessitated a certain degree of extra-household, perhaps community-wide, administration, or some levels of extra-household political power. The logical need for political management at the site is further supported by other lines of evidence, such as the fortification wall.

The interpretations of specialized production at Köhne Shahar raise more questions than they answer, and this is due to the unique nature of the evidence. I still lack a clear understanding of the scale of labor division, the intensity of production, and the degree of specialization. The data is too limited to allow us to make inferences regarding the part-time or full-time status of craft production at the site. However, the data points to the existence of multiple specialized workshop units, the finished products of which were most likely not consumed at the site.

The successful management of the settlement's economy, and monitoring of exchange and trade routes at a time of increasing regional conflicts would have logically necessitated a certain degree of political complexity at Köhne Shahar. Moreover, the defensive needs of the site, and the nature of long-distance trade and exchange points to greater potential of the presence of administered production (Sinopoli 1988) or attached producers (Earle 1981) at the settlement. This latter point is speculative, due to the limited nature of the current evidence. However, regardless of the nature of the relationship between producers and a possible political central agency, the discovery of administrative technologies in the context of production is another strong indication of the existence of a management apparatus associated with production at Köhne Shahar. Although theoretically production in any level could have been administered, its assessment is easier in archaeological context since workshops are nucleated and associated with administrative technologies.

The role of craft production may not be well understood if we do not consider also the social status of craftsmen, producers, and artisans and the role that they played in their communities. Probably this is the most difficult subject to address in relation to social context of craft production. Deficiencies of the evidence for the social context of craft production induce us to turn to the situation in neighboring societies in hope of finding contextually and chronologically close parallels to the situation as it was at Köhne Shahar.

The time span that settlement at Köhne Shahar falls in (Early Bronze Age or roughly third millennium BC) is a period of time that from neighboring regions in the Near East, numerous written documents about daily live and economic activities are available. Written documents from third millennium BC Mesopotamia and other regions are great sources of information about the role of craft production and craftsmen, which we may use as a proxy for understanding the same issues in neighboring communities such as in Iranian Azerbaijan.

Some references to craftsmen and their activities in written sources from ancient Near East (see i.e. Oppenheim 1977: 329-331; Powell 1987; Zaccagnini 1983; Matthews 1995; Silver 1995; Zaccagnini 1989; Diakonoff 1981) and archaeological and ethnographic studies (i.e. Bisson, et al. 2000; Costin and Wright 1998; Shimada 2007; Wailes 1996; Hruby and Flad 2007; Sapir-Hen and Ben-Yosef 2014; Dow 1985; Stark 1991) has provided invaluable information about craftsmanship in the past that may help us better understand their social status, role, and their collective identity. Textual evidence indicates that most of the workshops in Mesopotamia were associated with major institutions such as temples and palaces (Van De Mieroop 1987; Freedman 1978; Leemans 1966).

Mary W. Helms (1993: 1-2) insightfully points to a portion of the epic of Gilgamesh and discuss the significance of status of craftsmen and artisans that is discernable through myths in ancient Mesopotamia. Gilgamesh after battle with Humbaba and realizing that he is mortal, turned to think deeply about his destiny. He then referred to craftsmen…

> Come, my friend, I will go over to the forge and have them cast
> the weapons in our presence!
> Holding each other by the hand they went over to the forge. The
> **craftsmen** sat and discussed with one another. "We should
> fashion the axe ...
> The hatchet should be one talent in weight. Their swords should
> be one talent ... Their armor one talent, their armor ..."
> *Gilgamesh said to the men of Uruk:*
> "Listen to me, men ... (Anonymous 1989: 20).

> Gilgamesh summoned all the **artisans** and **craftsmen**.
> (All) the artisans admired the thickness of its horns, each
> fashioned from 30 minas of lapis lazuli!
> Two fingers thick is their casing (?).
> Six vats of oil the contents of the two he gave as ointment to his
> (personal) god Lugalbanda.
> He brought the horns in and hung them in the bedroom of the
> family head (Lugalbanda?) (Anonymous 1989: 56).

Or after Enkidu's death Gilgamesh calls craftsmen ……

Just as day began to dawn, Gilgamesh ...

and issued a call to the land:

"You, blacksmith! You, lapidary! You, coppersmith!

You, goldsmith! You, jeweler!

Create 'My Friend,' *fashion a statue of him.*

... he fashioned a statue of his friend.

His features ...

..., your chest will be of lapis lazuli, your skin will be of gold."

(Anonymous 1989: 71)

And after great flood…

The boat was finished by sunset.

The launching was very difficult.

They had to keep carrying a runway of poles front to back, until

two-thirds of it had gone into the water(?).

Whatever I had I loaded on it: whatever silver I had I loaded on it,

whatever gold I had I loaded on it.

All the living beings that I had I loaded on it,

I had all my kith and kin go up into the boat, all the beasts and

animals of the field and the **craftsmen** I had go up (Anonymous

1989: 99-100).

Through these portions of the epic we can see how significant was the status of craftsmen[42] in early Mesopotamian society. Donald Matthews (1995: 466) argues that there was no distinction between artisans and craftsmen in the ancient Near East, especially in Mesopotamia. Craftsmen, especially smiths, were taught by divine and wise men, they were associated with kingship, and indirectly through kingship they were associated with "distant power-filled sacred places that carry ancestral or godly connotations" (Helms 1993: 2-3).

Reference to craftsmen and their work in written sources is scarce, even in royal inscriptions and letters. In general textual evidence for craft is very limited in Mesopotamia (Oppenheim 1977: 329; Matthews 1995: 456; Van De Mieroop 1987: xii-xiii; Ur 2014: 264). Through those few references, it is evident that whenever elites or rulers wanted to have stela, statues, costly votive offerings, furnishing for temples, or divine symbols, they assigned them to craftsmen (Oppenheim 1977: 329). Occasionally craftsmen and artists were among most important groups that Akkadian kings took them as prisoners in wars and brought them to their control (Oppenheim 1977: 64-67, 119; Matthews 1995: 458, 465). In Old Babylonian Mesopotamia there were two different groups of craftsmen and specialists; one group consisted of "guildlike" associations of craftsmen and merchants, and the other group consisted of highly trained professionals in "exorcism and divination techniques." The first group that is my focus was not independent rather it was overseen and attached to palace and temple institutions (Oppenheim 1977: 79-80).

Craftsmen were overseen by officials who served sanctuaries. Aside from recording incoming taxes, tributes, and the yield of the royal or priestly domain, officials were responsible

[42] Donald Matthews (1995: 455) states that based on both textual and archaeological evidence it is hard to draw a clear distinction between artist and craftsman in the ancient Near East.

for keeping track of everything in workshops, distribution of materials, and rations to craftsmen and workers. These were the people who used administrative devices and clays to write on and kept track of everything for higher authorities (Oppenheim 1977: 186, 230).

Sumerian sources from Telloh (ancient Girsu) and Neo-Babylonian texts indicated that along with workers of sanctuaries, craftsmen received wages and rations from temples. The reason why they were attached to these two institutions was because of difficulties in procuring resources and securing a market for goods and products. It seems that in later periods through Neo-Babylonian era craftsmen enjoyed higher status and prominence in Mesopotamian society (Oppenheim 1977: 79-81, 106).

In some settlements craft production activities especially pottery production were concentrated in some certain areas (i.e. see Wright 2001: 134-136). Matthews (1995: 456) argues that in general craftsmen were "classed together with other professionals, such as physicians or cooks." Their life did not differ from the rest of the society and did live separately in a distinct neighborhood. Craftsmen often were not slaves, yet sometimes they even could own slaves as assistants in work. Craftsmen were mostly free, but skilled individuals who were highly trained were usually employed by palace or temple institutions. It was not reasonable to train them and give unskilled slaves access to valuable materials. However, craft specialists were not monolithic group of people rather their status differed based on their work and professions (Matthews 1995: 458). Thus, it is simplistic to study social status of craftsmen without considering their internal differences, variables, and differing significances of their professions.

In the fifteenth century BC at Alalakh men involved with weaving, potting, and reed-working possessed a "low statuses" in their society, while masons, carpet knotters, seal cutters,

and coachmakers belonged to the second class called *eḫele* or *šūzubu.* In the same "class" we can also see mayor, scribes, and architects. Craftsmen were mostly free but sometimes they were slaves and prisoners, especially in the first millennium BC (Matthews 1995: 465). Those who were free had various statuses (Matthews 1995: 458).

We can recognize that the status of craftsmen is portrayed in two different images. Based on mythological information some craftsmen such as smiths and masons had really a high status in Mesopotamian society. They were valued and honored members of their society and associated with divinity through their masters or kings. However, a different image also is portrayed in other written documents. Beyond mythological documents, craftsmen were a group of people that were not paid well, dependent on either temple or palace institutions, and controlled by officials. These two contrasting images suggest that craftsmen with skills in very specialized crafts in Mesopotamian world enjoyed high status, were honored and highly valued members, but they did not necessarily possess considerable wealth and property. In other words, their status was prestigious rather than economic. We can recognize that sources of their prestige were their knowledge and skills, not necessarily their attachments to the institutions. Their attachment to the institutions could have added to their prestige.

The more they were knowledgeable and skillful, the more likely they might have been hired by the state or elites. However, it is ambiguous whether they were hired as full-time or part-time workers (Steinkeller 1987; 1996). Textual evidence from Ur III dynasty does not clarify to what extent they could work on their own and independently. But later archives from Isin shows that the craftsmen were employed as part-time workers in the workshops. Maybe this was the beginning of a time that the craftsmen got more independence in later periods (Matthews 1995: 458-459). Marc Van De Mieroop (1997: 177) argues that the existence of specialized craft

area is not clearly documented in archaeology of ancient Mesopotamian cities. However, often times craftsmen lived in close proximity with close association and more specialized craftsmen had certain powers and privileges compared to other members (Van De Mieroop 1997: 110).

Craftsmen served the taste and interests of the elites of their communities. For instance, archives at Mari shows that the palace was concerned about collecting artisans and craftsmen and sending to wherever they were needed (Matthews 1995: 465). Concerning the importance of craftsmen, it is sufficient to indicate that craftsmen not only served the taste and interests of the elite in their own communities, but they were also exchanged internationally between kings. In one of the Amarna letters during the New Kingdom in Egypt it is indicated that the king of Arzawa in Anatolia had sent many artisans to pharaoh Amenhotep III (Matthews 1995: 465). As it is seen, it is easier to talk about the importance of craftsmen than their status in the ancient societies. Therefore, controlling craftsmen especially foreign craftsmen could be one of the sources and/or signs or prestige and power (Matthews 1995: 467). We can assume that if there was a group of elite or a political authority, craftsmen at Köhne Shahar were very important for them, particularly those who lived inside of the citadel. Protecting them in a very defensible location inside of a walled quarter indicate how important craftsmen were.

In addition to some dimensions of specialized craft production at Köhne Shahar that I addressed so far, relations between identity and occupation also needs to be addressed. Occupation is one of the sources of social and collective identity. Development of collective identity also crystalize social segmentation and crystalize the existence of social boundaries which is very important in analyzing social stratification (see below). Thus, it is relevant to address collective identity.

Occupation and identity are closely related. On the one hand, "identity is an overarching concept that shapes and is shaped by our relationships with others," on the other, "identities are closely tied to what we do and our interpretations of those actions in the context of our relationships with others" (Christiansen 1999: 248-249).

Social processes and interactions contribute in forming, shaping, and reshaping identity which emerges "from the dialectic between individual and society" (Berger and Luckmann 1966: 174) and participation in occupation contribute to one's construction of identity. Occupations are key contexts in which a person becomes a particular person, and also creates and maintains an identity (Christiansen 1999: 547; Phelan and Kinsella 2009; Skorikov and Vondracek 2011). I assume that most of inhabitants (if not all) who lived inside of the citadel were craft producers. Even some of the inhabitants of outer town (if not all) probably practiced production. Especially those who lived inside of the citadel and collectively produced craft could have formed a distinct social group (see Forsyth 2010: 523-525). Aside from the fact that the fortification wall separated two groups of people spatially, occupational differences could have also added more depth to social divisions. These combined together, not essentially but possibly could have created "conscious awareness" (Skorikov and Vondracek 2011) of themselves as a distinct group that had different occupation and lived in a particular quarter[43] (in the citadel). Even if this distinction might not have been sharp with residents of outer town (if they also produces craft in some levels), however, compared to people from other settlements, they held a sharp distinct collective identity derived from their occupational identity.

[43] As Elizabeth Stone (1987: 3) points out, the terms neighborhood and quarter often times are used synonymously or interchangeably but sometimes quarter is used for a larger division within the city. In order to avoid confusions between smaller divisions within each of outer and inner towns, I use quarter for the citadel and outer town and will use neighborhood for smaller divisions within each of these quarters.

Occupation is one of the major elements of social categorization that closely related to collective[44] identity (Phelan and Kinsella 2009: 86; Unruh 2004: 290) and occupational commitment fosters construction of occupational identity (Skorikov and Vondracek 2011: 697). Based on "social identity theory" developed by Henri Tajfel and John C. Turner (1979; 1986), "two cognitive processes – categorization[45] and identification – combine to transform a group membership into an identity" (Forsyth 2010: 77; see also Tajfel and Turner 1986). People categorize others and themselves into various groups and apply stereotypes about the people and those categories to themselves. People may belong to many social groups but not all of their memberships influence on their social identities (Forsyth 2010: 77; see also Haslam 2004: 17-39). In other words, occupational differences in addition to spatial segregation could have contributed in creation of differentiations in social identity within the community lived at the Köhne Shahar that in turn could have been another playing factor contributing to the creation of social boundaries and differentiations. Their work and community situation could encourage both vertical and horizontal identification.

Analyzing inequality among communities of workers, peasants, or working communities in the ancient Egypt, Bruce Trigger (1993: 53) argued that, unlike Karl Marx's model, these

[44] Ashmore and his colleagues (2004: 81) argue that "there are two primary reasons to prefer the term *collective identity* to the somewhat more commonly used *social identity*. First, to refer to an identity as social is not to distinguish it from other forms of identification, such as personal or relational, that are also inherently social in origin. Second, in reviewing the literature from various fields and subdisciplines, we find that the connotations of *social identity* are more numerous and potentially more problematic than are those of *collective identity*. Using the term *collective* may eliminate some potential confusion. At the same time, we do not claim that *collective identity* is without ambiguity."

[45] As Forsyth (2010: 77) puts it: "social identity theory is based fundamentally, on the process of social categorization. People quickly and automatically classify other people into social categories: if we met Joe Gorman on the street we would rapidly slot him into such social groupings as man, middle-aged, American, and white, for example. And once categorized, our perceptions of Gorman would be influenced by our beliefs about the qualities and characteristics of the prototypical American, middle-aged white man. These beliefs, which are termed prototypes and stereotypes, describe the typical characteristics of people in various social groups." He also defines social categorization as "the perceptual classification of people, including the self, into categories" and prototypes (or stereotypes) as "a socially shared set of cognitive generalization (e.g. beliefs, expectations) about the qualities and characteristics of the typical member of a particular group or social category."

communities did not constitute an "unchanging economic basis of exploitative states," rather "their most advantaged members strengthened their positions by acting as intermediaries between their fellows and the state." People with differential social statuses were consciously aware of vertical and horizontal identifications and their occupations were one of the main sources of both collective identity and defining element of their social statuses.

The community at Köhne Shahar was spatially divided into two groups that one of them mostly practiced craft production or they were craftsmen. Thus, it can be extrapolated that these spatial segregation and social segmentation could also connote the existence of status differentiations as well. Now probably the important questions to be asked are how homogeneous or differentiated the community was at Köhne Shahar. If they played role of craft producer where was their status in the social hierarchy? Was their distinct occupational identity as one of the sources of social status as well? We do not know where exactly such occupational identity put their status in a hierarchical order, however, we do know that at least two strong sources of variability, spatial segregation and occupational identity could be source or determinant of their status in their community. Actually one of the good indicators of economic position in social relations is occupation (Bourdieu 1987: 4).

Since the terms status and role are used interchangeably and are not clearly distinguished,[46] one may argue that craft producers at Köhne Shahar had different roles rather than different statuses.[47] As it was discussed earlier, roles are the dynamic aspects of statuses and "there is not roles without statuses or statuses without roles" (Linton 1936: 113-114; see also

[46] Zelditch (1968: 251) clarifies and distinguishes these two terms nicely as: "one can make the distinction easily enough if one keeps in mind that status defines *who* a person is (e.g., he is a child, or a Negro, or a doctor), while role defines *what* such a person is expected to do (e.g., he is too young to work; he should not want to push himself ahead; he should care about patients)."
[47] For definitions and distinction of these two terms see chapter 2.

Biddle 2000; Sarbin 1968; Zelditch 1968; Banton 1996). Thus, it is logical to assume that craftsmen at Köhne Shahar had a social status (or position) in their community, even though we do not yet know whether they had a high status or low. If they played a role then had a status.

5.4. Administration Technologies, Record-Keeping, and Control

The primary source of information on administrative control comes from a stamp seal, a sealing clay, and a dozen of tokens, particularly their distribution in relation to manufacturing activities. Except sealing clay which was found in S201, a mud-brick paved room between workshop units, all other objects representing administrative technologies were found in debris related to production activities, either within the workshop units or in associated spaces such as S101 which was space for discard.

It should be noted that administrative technologies are not common in Kura-Araxes settlements, particularly no token has been documented in any Kura-Araxes settlement. The total number of seals recovered from Kura-Araxes settlements in southern Caucasus are not more than ten (Sherazadishvili 2014: 168) and also recently from Kul Tepe at another Kura-Araxes settlement in Iranian Azerbaijan (Abedi, et al. 2014: 49, 149). The considerable number of administrative technologies at Köhne Shahar most likely indicate some degree of labor specialization, specialized production, and control over economic activities by probably a central authority.

In addition to clay tokens, stamp seal and sealing clay are also of significance and provide "direct evidence" of "administrative control" before writing was invented (Pittman 1994:

121; Pollock 1992). The sealing clay was found in space S201, which was paved by mud-bricks, located next to the structure (S202) containing six large storage jars. Similar spatial organizations and distribution pattern of sealing clays are also known from in Arslantepe period VI A and Tepe Gawra (Ferioli and Fiandra 1983; Rothman 2004: 87). At Arslantepe, for example, a collection of sealing clays was recovered in a room adjacent to a storage room. Piera Ferioli and Enrica Fiandra (1983: 464) argued that " sealing clays were kept for a certain time in the storage-room, then they were collected together and left in single archives next to the storage-rooms, where they were kept until the end of the administrative period; at this point, after the proper controls, they were disposed so that they could not be used any longer."

Along the eastern wall of S202 there were six large jars (five of which were mostly complete) placed on the floor or worked into the occupational floor. Given their large sizes, these jars were most likely used as storage vessels. In a similar archaeological context documented in the Nineveh V period at Tell al-Raqa'i in northern Mesopotamia, Schwartz (1994: 28) hypothesizes that storage facilities along with administrative technologies are indicators of specialized activities by which elites of the society could collect agricultural "surpluses to support their dependent personnel."

The role of storage in both the subsistence and the political economy is very important. T. D'Altroy and T. Earle (1985: 190-191) argue that in subsistence economy the storage is used as a mechanism to average "fluctuations in the availability of a material over time" and also "to average annual variation in food production that unpredictability affects total yearly harvest of food." Storage is therefore crucial to successful management, because institutions such as "governmental bureaucracies, the military, and religious hierarchies, require a constant and

reliable supply of materials" when they are supplied by staple products (D'Altroy and Earle 1985: 191).

Administrative technologies do not always suggest the existence of a state or political power. However, the involvement of a political power in specialized craft production and exchange systems necessitates control and its associated administrative technologies. The clay tokens, sealing clay, and stamp seal found in workshop contexts at Köhne Shahar are indicators of an administrative control system. "The foremost function of tokens was counting goods" (Schmandt-Besserat 1992: 197), and counting and accounting represented by these artifacts would have been crucial for the control of goods and the production process. Long before the writing system emerged in the ancient Near East, need for keeping track of goods and products led to the development of a system of 'counting' that was represented by small clay objects that are called *tokens* (Robinson 2007: 58; Schmandt-Besserat 1996; Schmandt-Besserat and Erard 2008).

Probably hollow egg-shaped tablet in the palace ruins at Nuzi, ca 1500 BC. (Oppenheim 1959) is the most important discovery about tokens or as Denis Schmandt-Besserat (1996: 9) puts, it was “the Rosetta stone of the token system.” This tablet bears an account of a transaction of forty nine animals in a cuneiform text which refers to forty nine counters inside of the tablet. After breaking it, the excavator found forty nine tokens inside of the tablet corresponding to the number of animals listed in the text (Oppenheim 1959; Schmandt-Besserat 1996: 9; 1978: 52).

Denise Schmandt-Besserat (2007: 3) argues that tokens in various forms were means of accounting even in farming communities: "each token shape was a symbol for one particular unit of merchandise." This development was driven by the need for counting and accounting in agricultural economies based on storing and cultivating products, as well as the socioeconomic

changes that followed the development of agriculture. In other words, "the development of tokens was tied to the rise of social structures, emerging with rank leadership and coming to a climax with state formation" (Schmandt-Besserat 1996: 7). Although Schmandt-Besserat argued that using tokens and token impressions on bullae were "a step towards the marking of clay tablets" (Schmandt-Besserat 1978; 1981; 1992; 1996), there are some disagreements (see i.e. Zimansky 1993) and some scholars consider tokens as supplements and not predecessors of writing (Robinson 2007: 60).

Clay tokens were recovered at many archaeological sites in the Near East (Schmandt-Besserat 1978). They were recovered both within buildings and from open spaces. In urban centers, token were recovered more frequently from official buildings or temples. In many cases also they were recovered among refuse and with other discarded materials suggesting that as record-keeping devices they were discarded once their function was fulfilled. However, in all cases it seems that they were used primarily as counters (Schmandt-Besserat 1996: 29-30). As I discussed earlier most of tokens at Köhne Shahar were recovered within S101 among refuse but associated with production units and manufacturing processes. Although our evidence is still limited, the amount of variation in the shape and size implies that multiple types of crafts were involved in workshop units. In other words, along with other lines of evidence such as different finished and unfinished objects, the variation in tokens also points to multi-craft production at Köhne Shahar.

Before the development of writing in the ancient Near East, sealing clays functioned as a significant element of administrative mechanisms in economic and political organizations (Ferioli and Fiandra 1983; Rothman 2005a; Rothman and Blackman 1990). Sealing clays are clear indicators of property ownership in administrative systems of goods distribution

management (Gibson and Biggs 1977; Nissen 1988: 74-76; Renfrew and Bahn 2008: 212-213, 374) and could also be indicator of quality control, authenticity, ownership, and commodity branding (Wengrow 2008). In other words, "sealings offered a means to restrict access to goods that were being stored at a given location, transported from one site to another" (Rothman and Blackman 1990: 19).

Hence, their context is highly depended on what items the access to which they restricted. At Köhne Shahar, the sealing clay was found in room S201, which is situated between a workshop/storage room (S202), and another workshop-related room (S101) to the east, and another workshop unit to its northeast (S401). The archaeological context of S201 is related to control of production activities, and the sealing clay were used for controlling craft production, flow of goods and labor, and/or the exchange of finished goods. The sealing clays could have also functioned as storage or production records for the elites or their administrators. In this sense, analyzing the source of the sealing clay is very important to understand the geographical extent of interactions of leaders, if it accompanied goods through long-distance trade (Rothman and Blackman 1990: 19-21).

These technologies do not fulfill the organizational needs of small kin-based societies. Rather, they are most needed for controlling exchange, trade, and modes of production in complex societies organized based on extra-kin economic and political relationships between different individual and institutions (Rothman 1994). "Administration or bureaucratic development" as indicator of political hierarchy is considered one of the key factors in the development of social complexity (Rothman 2004: 76).

Indeed, one of the major consequences of specialized production and trade was the development of institutionalized bureaucratic organizations (Algaze 2001a: 206; Wright and

Johnson 1975). Probably the most significant of which was control over labor. In order to maintain control, the political establishment "can use diverse economic, social, political, and religious strategies; however, control rests first and foremost on dominating labor" (Earle 1991b: 71). Taken together, the seal, sealing clay, and tokens within specialized craft production context argue for the hierarchical ordering of the economic system and of individuals, administrative, and possibly even institutions.

5.5. Residential Segregation

There are some important differences between modern and ancient urban centers in terms of contextual variables and some social dynamics, however, theoretical frameworks derived from studies on social composition of modern urban centers can provide useful insights into the organizational dynamics of complex societies in the past. Hence, current understanding of the dynamics of residential segregations, which is indebted mostly to the efforts of sociologists, urban geographers, and planners, may enable us to address anthropological and archaeological questions.

Residential segregation concerned many sociologists and urban geographers in the past especially since the mid-20th century. Since then, various definitions of the segregation, its causes and consequences, and its implications have been strongly debated (Massey and Denton 1988; Massey 1984; Kempen and Özüekren 1998; Gregory and Urry 1985; Thrift and Williams 1987; Black 2000; Nightingale 2012).

Social processes have been the major playing factors in the creation, maintenance, and transformation of neighborhoods and districts (Smith 2010: 137-138, 150). These processes are

put in two general categories: top-down processes (formal or master planning) and bottom-up processes (informal or generative) (Smith 2010: 150; see also Briassoulis 1997; Uzzell 1990; Hakim 1986). To Peter Marcuse (2002: 12-13) divisions fall into three categories: division by culture, division by functional role, and differences in status.

Residential segregation could be based on various line of divisions (Marcuse 2002: 12-13). However, considering social context and processes in which the residential segregation takes place and operates, it crosscuts several other social issues and we may think about its possible implication and indications such as social exclusion[48] vs. inclusion, majority vs. minority relations between segregated groups, collective identity differentiations (ethnic identity), occupational identity differentiations, insider vs. outsider, social status differentiations etc. (see i.e. Massey and Denton 1988; 1993; Percy-Smith 2000; DeWall 2013; Gregory, et al. 2009: 673-674).

In general, by residential segregation, privileged groups could keep underprivileged out and exclude them from some resources and benefits (Peach 1996: 145). In other words, since spatial segregation within the community begins with marking out the 'other', it does represent social exclusion (Ratcliffe 2004: 59-61). Most importantly, residential segregation is considered one of the barriers to social mobility, particularly to upward mobility since it prevents observing and emulating life style of elites (Duncan and Duncan 1955: 500).

Surveys already demonstrated that a fortification wall separated a densely built citadel or inner town from the more sparsely built extramural area at Köhne Shahar. However, in order to

[48] Indeed residential segregation is spatial dimension of social exclusion. See Percy-Smith 2000

understand the nature of archeological deposits out of the citadel, for the first time and in the third season, I opened a large trench that revealed a few architectural structures and two phases of occupations. The last phase which was our focus revealed the same type of ceramics that we recovered from horizontal trenches in the citadel. Ceramics and also stone implements from the outer town do not demonstrate any differentiation and suggest that the last occupational phases outside of the citadel were most likely contemporaneous with archaeological contexts uncovered in the citadel.

In order to understand residential segregation at Köhne Shahar and to embrace its complexities we need to categorize and address each of the issues in terms of issues related to causes and consequences separately. Causes and consequences of residential segregation at Köhne Shahar need to be investigated more in future, however, as earlier I proposed few possible scenarios for its causes and sources, we may be able to speculate about the consequences as well.

Then one may wonder how and why people with the same culture were divided into two groups and segregated to live in both sides of the fortification wall. Whose preference did residential segregation represent? Was it organically developed or was it planned? Does the residential segregation convey any message about group status differentiation or class-like stratification? What was the nature or basis for the residential segregation? We may not be able to find answers to all of these and other related questions but we may think about several possible scenarios that explain the causes of residential segregation and how residents ended up being segregated. Probably three of the scenarios could be appropriate and possible.

In the first scenario, only the citadel was initially occupied, and there was no occupation outside of the citadel.[49] With or without a central political leadership, a group of people first occupied the citadel and participated collaboratively in the construction of a fortification wall in order to protect themselves and their possessions. For some reasons - subject to further studies – the population grew, and because of lack of enough space some people had to inhabit beyond the wall in outer town. In other words, the construction of the wall in the first phase caused residential segregation in later phases, not from the beginning. Probably future explorations in the outer town, especially some trenches for stratigraphy, may allow us to test this scenario.

The second scenario assumes that population was already large in the time of settlement foundation, and the citadel was too small to accommodate all. Thus, through a decision-making process people were divided into two groups, one living inside of the citadel and the other in the outer town. This scenario also raises questions of whether the division occurred before or after the construction of fortification wall, whose preference was that, and based on what kind of considerations people were chosen to live either inside or outside of the citadel. Then, we need to take cooperation dilemmas (see Olson 1971: 28; Hardin 1982: 17-20; Ostrom and Gardner 1993: 93; Lichbach 1996) into our considerations since the construction of the wall should have been undertaken cooperatively and in this scenario inhabitants of outer town were excluded from benefits of the construction of the wall.

The third scenario assumes that outer town inhabitants represented neither expansion of population nor planned division of the community. They might have been people with different identities who were later gravitated to the citadel, which was prosperous and secure. In other

[49] Excavations outside of the citadel demonstrated at least two occupational phases. Whether people in the first occupation of the site inhabited in both citadel and outer town is subject to further excavations but I now know that there are at least two occupational phases outside of the citadel.

words, economic growth grounded in craft production and specialization in the citadel was the cause for appearance of a quarter like a suburb in the outer town. In this scenario, the inhabitants of outer town had a different identity but not necessarily from a different culture other than Kur-Araxes.

Drawing upon these three possible scenarios (or even others) I can now discuss some of the possible (intended or unintended) consequences of the construction of the fortification wall in northern side of the citadel. Regardless of the possibility of each of these scenarios that may explain the causes, the consequence was the appearance of residential segregation.[50] Although based on the functionality of the fortification wall I could make some inferences about the reasons behind the construction of the wall, the social impacts of its construction could also be very significant and must be addressed. Residential segregation is not a natural phenomenon, rather it is a social process and may have a profound impact on social interaction and behavior (Peach 1996). Residential segregation can be both a cause and a reflection of social inequality (Kempen 2002: 240; see also Massey and Denton 1993; Gregory, et al. 2009: 674).

The construction of the fortification wall resulted in the creation of two large segregated quarters that are residentially segregated. Even without the fortification wall, the inner town (also or upper town) and outer town (also or lower town) could have been physically distinct quarters.[51] However, the construction of the wall in the northern side of the citadel made them two segregated quarters with more distinction. Thus, studies of residential segregation are also interconnected with spatial relations and neighborhood formation at Köhne Shahar.

[50] Here I follow the broad definition provided by Massey and Denton (1988: 282) as they put: "residential segregation is the degree to which two or more groups live separately from one another, in different parts of the urban environment."
[51] For definitions and dynamics of "neighborhood" see Smith 2010

Social life went on in both sides of the fortification wall over a long time span separately and the wall restricted social interaction between them. Living in a distinct quarters over a long time could have led to some social similarities within the quarters that in turn might have generated material culture with similar patterns in each quarter. In other words, shared spaces could have led to shared social realities and some levels of homogeneity (Garrioch and Peel 2006: 667; Smith 2010: 146; Sjoberg 1960: 95-103). There is a close relationship between spatial and social organization of communities and somehow spatial patterns may reflect social roles (not necessarily status), associated practices, and settings (Rapoport 1990: 11-13; Smith 2010; Sjoberg 1960; and see also Rapoport 1969). Similarly, Peter Marcuse (2002: 14) also argues that "social relations determine spatial relations, but these in turn influence, generally but not always reinforcing, social relations."

Although the citadel was a distinct quarter, it was also divided into physically several distinct neighborhoods. Unlike other Kura-Araxes settlements, the appearance of residential segregation at Köhne Shahar corresponds with other spatial patterns in the late prehistory and Bronze Age of the Near East impacted by some fundamental social transformations such as population growth, urbanism, neighborhoods within the cities, specialization and craft production, quarters of artisans, emergence of social institutions, and the increase of social inequality (Bar-Yosef 2001; Bandy 2008; Algaze 2001a; 2008; Stone 1995; 2007). This can be addressed and tested at Köhne Shahar as well.

In southern Mesopotamia and Susiana (see Adams 1962: 114-115) people clustered in larger settlements, walled cities, and more defensible political units since they felt vulnerable. Probably rulers of emerging cities also welcomed immigrants for their labor pool and military force. Therefore, like other examples, Köhne Shahar might have grown and become bigger as

competition in economy, conflict, and struggle for supremacy drove polities to that direction (see Flannery and Marcus 2012: 472-473). The possibility of this scenario also might be evaluated by some explorations in outer town.

The complex way of life in the ancient Mesopotamian settlements is also reflected in their spatial organization, particularly in residential segregations and the organization of neighborhoods. Carl H. Nightingale (2012: 20) argues that the idea of residential segregation is as old as emergence of cities and has roots in the institutionalization of authoritarian states, religious elites, and inequalities of wealth that "included efforts to monopolize control over urban land." Based on poems from Neo-Babylonian era, Eridu, the first city for Sumerian scribes, is identified as a city where followers of Marduk were segregated by his order to surround his holy house "with separate dwellings for ordinary mortals charged with the place's upkeep" (Leick 2002: 1-29; cited in Nightingale 2012: 20). In the contrary, Elizabeth Stone (1987: 3, 7) argues that in terms of social composition, neighborhoods in ancient Mesopotamia were not so distinct from one another, however, almost all preindustrial urban centers show some levels of neighborhood differentiations. There were no clear distinction between the residential areas for elites, commoners or artisans (Stone 1995: 248; Van De Mieroop 1992: 130; 1997: 112; Stone 1991).

In later periods, with the abundance of textual evidence, useful information can be extracted about the social composition of neighborhoods. For instance evidence indicated that area EM at Ur was mostly inhabited by clergies while businessmen mostly occupied area AH (Stone 2007: 219-220; 1991: 241; Van De Mieroop 1992: 126). Likewise, at Nippur farm owners were dominant residents of area TA and residents of area TB were mostly officials related to state institutions (Stone 2007: 219-220). In terms of urban organization and planning,

many Mesopotamian cities were divided into different districts and sectors by either canals or walls. In cities such as Uruk, Larsa, Ur, Abu Salabikh, Nippur, and Meshkan-Shapir residential areas were separated from administrative and cemetery areas (Stone 2007: 225; 1991).

Dependence on large institutions such as temples and palaces or the degree of independence of families from these institutions played a critical role in their spatially clustering of people. Those affiliated with or dependent on the institutions tended to physically cluster around them. In general and based on physical clustering, there were three major neighborhoods in Mesopotamian cities: religious, administrative, and residential/artisanal (Stone 1991: 236, 239). Interestingly, according to textual evidence, especially evidence that allows the reconstruction of genealogies, in Mesopotamian cities mobility among social groups was high. Even social status of a family in one single generation could have dramatically changed (Stone 2007: 219). Architectural, textual, and mortuary analyses at Ur indicated that group status or "class" in a modern sense did not probably exist, rather social status was mostly based on affiliation of persons and families with the large institutions (Luby 1990).

Residential segregation was also documented at Sasanian settlements in Mughan Steppe in NW Iran. In these sites, extramural areas were separated by a wall or moat/canal from fortified portions or citadels (Alizadeh and Ur 2007; Alizadeh 2014b; 2011). The same pattern was also documented in Gorgān plain in NE Iran (Sauer, et al. 2013). Segregated residential areas is documented in many societies and cultures across the globe from ancient to Medieval and through modern times.

Nightingale (2012: 19-43) argues that segregation began with "sacropolitical" form in ancient Mesopotamia, however diffused out of Mesopotamia and took different forms or bases such as segregating strangers, ghettos which were religious-based segregations, and segregations

based on classes, crafts, clans, castes, and the sexes. Fully homogeneous neighborhoods are probably rarely documented (Smith 2010: 150) but studies on the social composition of neighborhoods suggest that the clustering of people in neighborhoods could be based on ethnicity (Van De Mieroop 1997: 243; Cowgill 1992; Beals 1951; Greenshields 1980), religion (Marcus 1989; Raymond 2005: 314-328; Stillman 1995; Kark and Oren-Nordheim 2001), occupation (Van De Mieroop 1997: 177; Tosi 1984; Liu 2006: 188; Béal and Goyon 2002; Slater 1989; Lilley 2002; Nicholas 1997; Smail 2000), and social status (Sjoberg 1960: 95-103; Xiong 2000: 217-234; Low 2003: 13-14; Gutschow and Kölver 1975).

The fortification wall and residential segregation impacted on the frequencies of movements and social interactions between the citadel and outer town that in turn could have led to social distances. Köhne Shahar was not naturally divided. Rather, there should have been a social process behind the residential segregation. Thus, it is necessary to put the question of agency in the foreground. Despite all intricacies, cross-cultural and historical studies indicate that residential segregation is designed to complement the control of an elite or privileged group over resources and underprivileged (Nightingale 2012: 44). Even if at Köhne Shahar it was not designed so, it resulted in unequal access to security and protection and could have led to the perpetuation of social status of the privileged group, if there was any.

For a variety of reasons elites may use residential segregation as a mechanism for social control. Physically separating people can lead to limiting access to opportunities and exclusion of some groups from public goods and public events. In this sense, neighborhood and location matters since they directly affects proximity to opportunities, quality of social networks, and security. In addition, residential segregation could also be a response to a social threat such as a threat from a group with a different social identity (DeFina and Hannon 2011: 275, 284; Charles

2003: 168). At Köhne Shahar one thing is obvious; residents of the citadel lived in a higher elevation, well protected by the fortification wall, and had access to security while residents of outer town (lower town also) remained vulnerable and unprotected.

Spatial distances decreased social interactions between these two groups, and could have also strengthened neighborhood associations that further contributed to the formation of a collective identity along with an occupational association. In other words, the wall created physical distance which in turn and especially in the long term created "social distances" or "social space".[52] There is a close relationship between spatial distances and social distances. There is also a dynamic relationship between social status and the residential association (Duncan and Duncan 1955: 502-503).

Wielding the segregation, its maintenance, and its continuity involved negotiations and conflicts. One of the questions that remains unanswered and untouchable is whether residents of the citadel chose their dwelling and residential area themselves. In other words, one may wonder whether residents of the citadel did choose their residential area or were coerced to live there. If they were coerced, then the citadel might have functioned as a ghetto-like quarters and segregation was an institutionalized process (see Kempen and Özüekren 1998).

Residential segregation could have some advantages as well. For instance, residential segregation may minimize group conflicts and facilitate also a greater degree of social control (see Massey and Denton 1988; Knox and Pinch 2010: 165-186). The possible political authority at Köhne Shahar could have taken advantage of this aspect of the residential segregation.

[52] For discussions on social space see Bourdieu 1985, 1987; for social distances and its relations with social space see Bottero and Prandy 2003; see also Charles 2003: 182; Murtagh 2002: 36

Overall, discerning similarities and differences in the lifestyles of occupational groups and groups with different residential associations may allow us to address the distances and proximities of these groups within an overall social spaces which in turn helps us understand the relational aspects of social differentiations (Bottero and Prandy 2003: 186; Bourdieu 1984: 77). However, it should be noted that physical distances may help us discern possible social distances but not necessarily lead us to social orderings (Bottero and Prandy 2003: 188). It is interesting that at Köhne Shahar residential segregation also corresponds to and equates with social exclusion, exclusion of the people of outer town from security, protection, and some possible opportunities.

As it was noted above, people of outer town were excluded from benefits of the construction of the fortification wall that could be a public good. Thus, the wall may also connote a social boundary between people of the citadel and outer town. In other words, the wall represents a material expression of a social boundary at Köhne Shahar. Together with residential segregation, social exclusion may further imply the existence of status differentiations and inequality. These should remind us that social inequality is also a behavioral and interactional phenomenon (Berreman 1981a: 4). Among processes associated with the production and reproduction of social inequality, indicators of at least two of them such as segregation and exclusion are expressed at Köhne Shahar.

Wendy Bottero and Kenneth Prandy (2003: 191-193) argue that the identification of social boundaries, social closure and distinct groups within a social organization are key conceptual paradigms in studies of inequality and stratification. Boundaries and social exclusion are not taken here as evidence of social stratification, "but instead are placed within a wider model of social distance processes" (Bottero and Prandy 2003: 194). Thus, the identification of

such groups with boundaries is the 'first fact' in analyzing social stratification. Aside from the construction of social boundaries, its maintenance and perpetuation is extremely important in analysis of social stratification since it involves collective action (Barnes 1992: 262).

The critical question is whether segregated neighborhoods express the preference of a political leader, the people who lived inside of the citadel, or, less likely, the preference of inhabitants of outer town. No need to say that, if the third scenario was the case, then inhabiting outside of the citadel was the choice of those people who immigrated to the site and formed a suburban quarter in outer town. If this is the case, it is logical to think that they could not have the same social status that inhabitants of the citadel had.

Overall, based on evidence and indicators I would argue that those who lived inside of the citadel and their possessions were more important compared to those who lived in outer town. However, being important does not necessarily mean that they occupied a higher status in the social structure of their community. They were protected by living in a naturally defensible location and by the fortification wall. They had unequal access to greater security. On the other hand, people who lived in outer town were excluded from security, remained unprotected, and vulnerable. Since excluding a group of people takes place in a social process, residential segregation actually represents one of the material manifestations of social inequality that existed among the community at Köhne Shahar. Therefore, in addition to its functionality, the fortification wall also represented a material manifestation of a social boundary between at least two groups of people within the community.

A number of indicators point to the existence of a central political authority. There was an unequal access to decision-making and inequality in terms of power. The functionality of the fortification wall indicates that intergroup conflicts gave rise to a leadership position that in turn led to the creation of inequality in power. In other words, power inequality and political hierarchy are reflected in the construction of the fortification wall. This is further supported by craft specialization in a community level and a central control that is reflected in administrative technologies. Craft specialization could be either an additional cause for the development of the political hierarchy or one of the consequences of the development of a central political authority. No matter what the cause, craft specialization and devices of control also suggest the existence of a political hierarchy.

Craft specialization on a community level, residential segregation and social exclusion, and external conflicts all suggest that social boundaries should have been developed hierarchically and heterarchically. The same processes also could have given rise to the development of a collective identity, and its development was basically fostered by the existence of social boundaries manifested in intergroup conflicts, occupational identity, and social exclusion. Social boundaries are key to the development of social stratifications.

Chapter 6. Conclusions

Compared to other contemporaneous hierarchical societies, the absence of important features of social complexity in Kura-Araxes settlements, like a clear evidence for social stratification, monumental construction of public buildings, and sharp social inequality (Kohl 2009b: 250), does not support that these Early Bronze Age communities were 'fully complex,' to use the general conception of most Near Eastern archaeologists. On the other hand, the pastoral aspects of KACC may evoke the notion of egalitarianism.[53] The assumption of egalitarianism or low levels of social complexity in Kura-Araxes communities is based on comparisons with Maikop and Mesopotamian examples (Kohl 2009b: 244).

The data from three seasons of excavations at Köhne Shahar pose more questions than answers. By revealing some evidence on social inequality and degrees of complexity at the site, however, it has revealed unambiguous social variability within KACC, much greater than had been assumed before. Based on this evidence, I can draw some concluding remarks

[53] There was a prevailing assumption in the past according to which pastoralist societies were generally economically egalitarian (i.e. see Asad 1979; Goldschmidt 1971; Mulder, et al. 2010; Parkinson 2002; Porter 2012; Salzman 1979).

6.1. Stratigraphy and Chronology

It was essential to establish the contemporaneity of the fortification wall illustrated on Kleiss and Kroll's map (1979) with the occupation phases of the settlement. We excavated TT1 to the natural basaltic bedrock, 2.5m below ground surface. The trench revealed five architectural phases, numbered 1 to 5 from bottom to top.

The careful examination of the earliest archaeological layers of TT1 demonstrated that: a) the construction of the fortification wall preceded, or was contemporary with, the earliest archaeological deposits inside the citadel, and b) the fortification wall was in use until the site's abandonment in Phase 5. Based on our initial assessment, the wall must have been at least 2.5m wide and 2.5m high.

With a few exceptions, all ceramics from TT1 represent typical Kura-Araxes ceramics. In other words, occupation phases at Köhne Shahar are solely Kura-Araxes. Similar ceramics are reported from many contemporaneous sites in the south Caucasus, eastern Anatolia and northwestern Iran. Comparisons with ceramics from many of the Kura-Araxes settlements (see chapter 4) indicate that the limited ceramic assemblage from TT1 point to the Kura-Araxes phases II and III. This suggests that Köhne Shahar was settled between the very end of the fourth/beginning of the third millennium until the last centuries of the third millennium BC.

6.2. Fortification Wall and Conflict

Protruding round towers are unknown in Kura-Araxes and the Early Bronze Age of Caucasus or greater Caucasus, and the dimensions and methods of construction (material such as rubble core, double faced masonry) of the Köhne Shahar wall do not look like a Bronze Age construction. Rather it appears similar to Urartian techniques.[54] More than anything else, the towers along the wall reinforce the defensive/militaristic interpretation of the wall, which is unknown in Kura-Araxes settlements.

Several lines of evidence suggest that the fortification wall at Köhne Shahar was defensive. Selection of a promontory which makes the settlement naturally defensible, protruding round towers along the wall, an obsidian arrowhead, and a fragment of mace-head are strong evidence emphasizing the defensive/militaristic aspect of the wall. In fact the construction of the wall indicates that occupants of the settlement predicted warfare and were apprehensive of potential military incursions. By selecting the promontory for residence, the occupants of Köhne Shahar strategically created a confined space for attackers. This indicates that siege was a known military tactic, and hints at the prevalence of intergroup conflicts and warfare (see Otterbein 2004: 192-193).

The contemporaneity of the fortification wall with the first occupation phase of the citadel suggests that initial occupation was deliberately planned and concern for external conflict preceded the construction of the wall. Indeed, the precedence of external conflict, or its potential, was the main consideration of occupants in choosing the promontory. Furthermore,

[54] I am grateful to Adam T. Smith for sharing his insights generously with me on these issue through email exchanges.

the continued use of the wall during all occupation phases indicates that the threat of warfare existed throughout the entire occupation of the site. Therefore, the primary purpose of the wall at Köhne Shahar was defensive and it was constructed to protect people and possessions inside of the citadel.

A group of people bearing Kura-Araxes material culture colonized the promontory, and also constructed a defensive wall to protect themselves and possessions against local inhabitants and rivals. This colonization may have been planned. This process required organization and coordination, which indicates hierarchical decision-making already before the formation of the site. Such migration and colonizing a new land in territory of "others" could not have taken place without an earlier plan, knowledge about the new territory, costs of migration, and hierarchy in decision-making in organization and coordination of immigrants (see Anthony 1990-901, 908-909; 1997: 22; Mignon 1993: 200-204; Chapman and Hamerow 1997: 1; Chapman 1997; Lee 1966: 49-50; Ritchey 1976; Heer 2000; Longino 2000; Düvell 2008).

My interpretation of the data suggests that managerial political power should have already formed around the time of the initial occupation of Köhne Shahar about the late 4th/early 3rd millennium BC. The genuine concern for external threat and the constant need for a comprehensive defensive strategy may have necessitated the development of central leadership. Similarly, the efficient implementation of a defensive strategy may have justified the development of a certain degree of labor organization. The fortification wall at the site points to the need for coordination of risk management and communal cooperation, which set the stage for the differentiation in decision-making and development of a central authority. Defensive mechanisms were common among early polities that aimed at securing the communal benefits against attacks from outsiders (Roscoe 2013: 59). This should not be surprising since both

archaeological evidence and textual sources point to the appearance of 'elites' in vast areas of southwest Asia and Central Asia during late prehistory and early historic times (Kohl and Lyonnet 2008: 40).

Concerning the social processes behind the construction of the fortification wall (see chapter 5), I proposed two possible scenarios: a top-down imposition in which a political power is involved or a bottom-up social process through which the wall was constructed in a cooperative undertaking. I analyzed the possibility of each of these two scenarios in detail. Analyzing a bottom-up scenario shows that in order to get the construction of the wall done cooperatively, it should have been a public good. In other words, people might have cooperated in the construction of the wall if it benefited all.

If the residential segregation took place from the first occupation phase, then only one group of people who lived inside of the citadel benefited from the security while people in outer town were excluded. If the occupations in outer town began in later phases, then this scenario will remain subject to future explorations. Moreover, we need to take the difficulties of achieving communal cooperation or its dilemmas into our consideration (Feinman 2013: 301; Hardin 1995: 38; Blanton and Fargher 2008: 6; Pasour 1981; Eerkens 2013). Therefore, the construction of the wall although could be possible in a cooperative manner without involvement of a central authority, it was highly challenging and seems less likely.

On the other hand, there are more indicators supporting a top-down imposition in which a centralized political power was involved. Generally, the necessity of organization of cooperation and constant coordination required a position and role of coordinator or organizer which provided basis for the development of a leadership position. If we break this down, first, in time of defense and war, coordination requires more than the desire and willingness of the members

of the community to cooperate. Second, the construction of stonework architecture such as the massive fortification wall at Köhne Shahar required a large labor investment, which in turn highlights a cooperative organization of labor and coordination. Third, continual maintenance, possible need for repair, and regulating the flow of traffics through gateways(s) also point to constant collaboration that required organization. Fourth, risk management, problem-solving, intragroup peacekeeping, and dispute resolution also could have given rise to development of strategies of leading and following (see Van Vugt 2006; Van Vugt, et al. 2008). Therefore, I think the fortification wall was a top-down imposition.

6.3. Craft Specialization

The data allows us to make several important conclusions about the social organization of production at Köhne Shahar. A combination of direct and indirect lines of evidence from large exposures in the citadel leave no doubt that craft production was practiced in the citadel in community-level and also in outer town probably to a lesser degree. Overall, the concentration of workshop activities in the citadel is abundant.

Although the evidence for specialized production needs further analyses and exploration, it is clear that at Köhne Shahar we are involved with site specialization. The concentration of craft production and manufacturing at Köhne Shahar, particularly in the citadel, suggests that majority of its inhabitants, if not all, were involved in some capacity with craft production. Furthermore, evidence such as stone beads, bone tools, stone implements, ceramics, and possibly metallurgy suggests the existence of multiple craft industries in the citadel. So far our

excavations have not revealed any major evidence of consumption and this suggests that products were traded. Craft production at Köhne Shahar cannot be fully understood if we do not consider its exchange system. A few independent lines of evidence, such as bitumen, ceramics similar to Ninevite V, tokens as record-keeping artifacts, the decorated bone/ivory container, indicate that the residents of Köhne Shahar participated in long-distance and interregional exchange networks.

Other KACC settlements have not demonstrated the high level of specialization seen at Köhne Shahar. In this sense, Köhne Shahar is unique in KACC. In addition to the evidence of top-down defensive mechanisms, the craft specialization record also suggests the necessity of a politically centralized organization.

Numerous studies have demonstrated that specialization of craft production is associated with the development of socio-political complexity, and it is generally considered a key factor in the economies of complex societies (Childe 1942; Clark and Parry 1990; Hruby and Flad 2007; Lamberg-Karlovsky 2015; Stein 1996; Wailes 1996). Craft specialization was either a cause or a consequence of the development of social complexity (Earle 2002; Stark 1991). Craft specialization as part of occupational specialization (Rice 1991: 258-259) is often linked to the emergence of chiefdoms, and state-level societies (Cross 1993).

At Köhne Shahar the relationship between craft specialization and political power still needs to be explored and analyzed in future studies. However, considering the evidence for external conflict and defensive mechanisms from the first occupation phase, the precedence of political power seems likely. Therefore, the process in which a political power extended its

control through warfare to control over the economy seems more plausible[55] and a top-down imposition of craft specialization was likely. As I discussed earlier, aside from competitions with elites in other communities, the main concern and also the motivation that led leaders to extend their control over the economy was that they wanted to maintain their status and social order in their communities. In order to maintain their status they can resort to several mechanisms, including craft specialization (Arnold 1993; 2009: 122; Brumfiel and Earle 1987: 3; Costin 2004; Earle 1991a; 1999; Hayden 1995; 1996; 2001; Stein 1996: 25; 1998; Vaughn 2009: 149).

Considering external threat, conflicts, hostilities of rivals, and overall insecurity, political power at Köhne Shahar had to be engaged with securing trade routes and exchange networks which in turn could have made them more dynamic in terms of making allies, procuring resources, and securing markets for goods and products. These factors could have been an extra source of inequality since these conditions make producer/craftsmen dependent on and/or attached to political power for access. As Oppenheim (1977: 79-81, 106) noted, some craftsmen in Mesopotamia were attached to the institutions such as palace and temple because of difficulties in procuring resources and securing market for commodities.

Most importantly, since many of the inhabitants at Köhne Shahar were involved with craft production, the community needed to compensate with staple goods. In such situations, leaders can mobilize staple goods, which enables them to maintain control over economy of the community (see D'Altroy and Earle 1985; Earle and D'Altroy 1989). Large storage jars, with administrative technologies such as stamp seal, sealing clay, and various forms of tokens in the

[55] For ties between warfare, ideology, and control over economy see Earle 1997: 142; Johnson and Earle 2000: 252

same context, suggests the possibility of administered craft production at Köhne Shahar. The involvement of a political power with specialized craft production necessitated control over various aspects of production such as labor, commodities, procuring resources, exchange, storage for staple goods, etc. Thus, it was necessary for them to benefit from different types of devices to control and administer all means of production.

The evidence of bitumen on ceramic fragments at Köhne Shahar points to interregional interactions, possibly with northern Mesopotamia or Zagros regions. The closest sources of bitumen to Köhne Shahar could be Siirt in southeastern Anatolia, or Mosul in northern Mesopotamia (Connan and Van de Velde 2010). In addition, the small bone/ivory container has designs comparable to Central Asian and eastern Iranian material culture, and it also further hints that Köhne Shahar may have been active in long-distance exchange. Long-distance trade and interaction of the South Caucasus with the Iranian Plateau is also attested in metallurgical and ceramic evidence (see i.e. Helwing 2012). Craft production is not disconnected from other processes, especially when it is practiced collectively. Rather it is intertwined with exchange system and social organization and structure of the community (Ericson and Earle 1982; Earle and Ericson 1977) which also leads to interdependence of communities (Stark 1991).

Considering these issues, the data suggests that the settlement was unlikely to achieve cooperative craft production without involvement of a central authority or political control. Therefore, not only because of higher possibility of excludability and subtractability, but also because of its interconnection and dependence on other processes such as exchange system, procuring resources and their scarcity, redistribution and disbursement processes, control and record-keeping, insecurity and external threats, it was unlikely that craft production could be practiced in a cooperative manner without central authority and control.

Another variable that may help us approach social organization and structure of the community at Köhne Shahar is collective occupational identity of craft producers. Occupation is one of the major elements of social categorization that contributes effectively to shaping social identity (Phelan and Kinsella 2009: 86; Unruh 2004: 290) and occupational commitment fosters construction of occupational identity (Skorikov and Vondracek 2011: 697). Considering the fact that Köhne Shahar represents a specialized craft production site and many of its inhabitants practiced craft production, occupation should have created a collective identification. Compared to people outside of the town and other communities in the region, craft producers of Köhne Shahar should have already self-categorized themselves and were also identified by others based on their collective occupation. Namely, people of Köhne Shahar held a collective identity based on their collective activities and occupation.

Social identity especially occupational identity is important in studying the status of people. Particularly collective identity is very important since its formation signifies the existence of social boundaries and segmentation. I would argue that occupational collective identity contributed to the creation of social differentiations and could have crystalized social boundaries at Köhne Shahar. Although social boundaries are not direct evidence of social stratification (Bottero and Prandy 2003: 194), identification of social groups with boundaries is the 'first fact' in analyzing social stratification (Barnes 1992: 262).

Textual and archaeological evidence from Mesopotamia and Egypt (see chapter 5) demonstrated that occupation could result in the creation of social statuses. As I discussed earlier, the appearance of a social group such as craftsmen was not only indicator of existence of social boundaries and differentiations, but skills and knowledge of craftsmen also could be a source of prestige and power for those who had control over them. Craftsmen were one of the

most significant persons that Akkadian kings took as prisoners in wars and brought them to their control (Oppenheim 1977: 64-67, 119; Matthews 1995: 458, 465). They were exchanged between rulers of Arzawa in Anatolian and Egypt as gift is also a sign of their prestige (Matthews 1995: 465).

Since concern over defense preceded almost everything, the development of a political power preceded the development of craft specialization at Köhne Shahar. It is possible that the formation of the site was inspired by the economic ambitions of a political power that may have extended its military control to include control over the economy. In this sense, it is plausible to assume that craft specialization could be a top-down imposition at Köhne Shahar. Many inhabitants at Köhne Shahar appear to have been with craft production and in this sense the settlement was a place for specialized economic activities. Following Charles Stanish (2004: 8), with a more complex labor organization and administered craft specialization, substantial wealth could be accumulated at Köhne Shahar. Thus, it makes more sense to protect people and wealth with a fortification wall.

6.4. Residential Segregation

The occupation in both sides of the fortification wall was continuous. Because those who lived inside of the citadel and possessions were protected by living in a naturally defensible location and by the fortification wall, I assume that they were more important compared to those who lived in outer town. Thus, they had unequal access to security. In other words, people who lived in the outer town were excluded from security, remained unprotected, and vulnerable.

Since excluding a group of people takes place in a social process, residential segregation actually represents one of the material manifestations of social inequality that existed among the community at Köhne Shahar. In addition to its functionality, the fortification wall may have represented a material manifestation of a social boundary between at least two groups of people within the community. Even if it was not designed so, in a long term residential segregation might have resulted in unequal access to security, protection, and could have led to the perpetuation of privileged status for one group.

It is hard to distinguish residential segregation from neighborhood formation at Köhne Shahar. Regardless of the overlapping, these two are not the same but interconnected processes. However, studies show that social processes have been major factors in creation, maintenance, and transformation of both (Smith 2010: 137-138, 150). In this study I concentrated more on residential segregation because of its implication on social inequality and stratification.

Like craft production, residential segregation also can be both cause and consequence of social inequality. We do not yet know how and why residential segregation at Köhne Shahar emerged and whose preference it represents. In order to gain concrete understanding about the cause of segregation at Köhne Shahar we need to do more excavations in the future in the outer town. However, we do know that social inequality is one of the major issues that residential segregation signifies. I proposed three possible scenarios to hypothesize the cause(s) of residential segregation (see chapter 5). The consequences of segregation remain mostly for future explorations. Residential segregation may result from a very wide range of social consequences that are to be analyzed in the future. However, there are few, but very significant consequences, that we can highlight here.

The fortification wall protected the citadel and restricted access from the outer town to the inside. The fortification wall and residential segregation impacted frequency of movements and social interactions between inhabitants of the citadel and outer town. This could have led to creation of a social distance and boundary between inhabitants of these two social groups or two quarters. Unequal access to security and social distance could have created a hierarchical order between inhabitants of these two quarters.

Studies indicate that there is a close relationship between spatial distances and social distances, and a dynamic relationship between social status and the residential association (Duncan and Duncan 1955: 502-503). No matter to what extent a political power or hierarchy was involved in creation of residential segregation at Köhne Shahar, it is important to note that wielding the segregation, its maintenance, and its continuity also involved negotiations and conflicts (see Kempen and Özüekren 1998).

Residential segregation at Köhne Shahar is a distinct case because it also corresponds to and equates with social exclusion: exclusion of inhabitants of outer town from security, protection, and some possible opportunities. Together with residential segregation, social exclusion may further emphasize status differentiations and inequality. The fortification wall may have connoted a social boundary between the people of the citadel and outer town, while simultaneously representing the material expression of a social boundary. As noted earlier, these are very significant in analyzing social groupings and their boundaries and eventually for realization of social stratification (Barnes 1992: 262).

Overall, craft specialization practiced in community level, residential segregation, social exclusion, and intergroup conflicts all suggest that social boundaries existed at Köhne Shahar.

Social boundaries are key to the development of social stratifications. As we see there are many reasons to think about the existence of a socially segmented and stratified community at Köhne Shahar.

6.5. Summary and Synthesis

Independent lines of evidence indicate that Köhne Shahar was an active participant in interregional exchange. Köhne Shahar was probably a socio-economic and political center in the highlands of Iranian Azerbaijan. These evidence help us make some inferences about social, cultural, and political organization at Köhne Shahar and situate it in the broader context of the ancient Near East and Caucasus.

A group of people bearing Kura-Araxes material culture established an implanted settlement on a promontory and constructed a fortification wall to defend themselves and their possessions against others. It seems that Köhne Shahar represents a Kura-Araxes colony for specialized production. What I see is a Kura-Araxes regional primary center, a specialized craft production site, and a complex polity like a chiefdom in the highland areas of Iranian Azerbaijan that came into contact and exchange with neighboring regions. The inferred socio-economic and political organization at Köhne Shahar corresponds to the evidence from other early complex polities of the late 4th-early 3rd millennium BC in the region. The exceptional is the fact that Köhne Shahar is a Kura-Araxes settlement, but one with dramatic differences from other Kura-Araxes settlements.

Köhne Shahar shares many of the characteristics such as some levels of administrative system, economic specialization and trade, increase of social inequality and stratification, and centralization with the early complex societies of Mesopotamia (see Rothman 2001: 10-11). By the second half of the 4th millennium BC and particularly during the middle and late Uruk periods trade became a significant part of the economy of early complex societies in the Near East (Sürenhagen 1986; Algaze 1989; 1993; 2004; 2007). Competition with other polities, complex societies, and colonies in the region,[56] may have driven elites of Köhne Shahar to establish a settlement based on specialized production and trade which helped them to maintain and reinforce their social status among their own people and elites in other communities.

A specialized production center such as Köhne Shahar contradicts a world system model proposed by Guillermo Algaze (1993) according to which a core (southern Mesopotamia) extracted raw materials and received products produced by unskilled craftsmen from the "peripheries" which is dominated by military, technological, ideological, organizational superiority or a combination of these. The evidence from Köhne Shahar does not demonstrate any kind of dominance from outside or any imposition by an outside force. The evidence such as tokens and administrative technologies which may seem Mesopotamian, represent adoption rather than imposition.

Furthermore, the evidence from Köhne Shahar suggests that "peripheries" were not passive and only for extracting resources, rather they actively participated in interregional exchange (see Stein 2002). The specialized craft production at Köhne Shahar was not only

[56] Some of known colonies such as Habuba Kabira South, Jebel Aruda, Sheikh Hassan etc. in northern Mesopotamia (Schwartz 2001; Algaze 2001; Stein 1999; 2001; Sürenhagen 1986) and Godin Tepe in Central Zagros (Young 1969; Young and Levine 1974; Weiss and Young 1975; Gopnik and Rothman 2011; Badler 2002).

highly significant for internal development, but trade also could be an important motivating factor in interregional interactions and Köhne Shahar could have been one of the major actors.

Köhne Shahar is one of the largest Kura-Araxes settlements known and is the largest settlement in the region (see Kroll 2004b). Data collected from Köhne Shahar does not match a core and periphery relationship. Rather, it seems that there were probably multiple centers connected with a symmetrical relationships (Stein 1999; 2001; 2002; Lamberg-Karlovsky 2008) that Köhne Shahar represents one of the highland centers. Considering the appearance of colonies of Mesopotamians in highlands of Zagros i.e. Godin Tepe to the east (Young 1969; Young and Levine 1974; Weiss and Young 1975) and southern Anatolia i.e. Habuba Kabira South, Jebel Aruda, Sheikh Hassan, Jerablus Tahatani etc. (Sürenhagen 1986; Van Driel and Van Driel-Murray 1983; 1979; Peltenburg, et al. 1995; Peltenburg, et al. 1996; Schwartz 2001). Probably Köhne Shahar represented a Kura-Araxes colony established in the highlands of Iranian Azerbaijan that its driven factors and regional interactions are yet to be understood and clarified.

Contemporaneity of disappearance of Uruk colonies by 3100 BC and appearance of Kura-Araxes material culture in highland areas of northern Mesopotamia, Anatolian, and western Iran has led some scholars to speculate that the expansion of KACC could be one of the contributing factors to the collapse or abandonment of Uruk colonies and enclaves in highland areas, which in turn, led to the collapse of the whole Uruk system (see Algaze 2001b: 76; Kohl 2007: 97-98; Lamberg-Karlovsky 2008: 10). The appearance of sites like Köhne Shahar might support this hypothesis.

The social, cultural, and political structure and organization at Köhne Shahar can be inferred from spatial organization, architecture, administrative, and economic evidence. Many traits of the site of Köhne Shahar, such as its nucleation within and around a citadel, its fortification wall with protruded towers, a central plaza, its sizable area in comparison to other contemporary sites (Batiuk 2005; Kroll 2004b) , specialized craft production, storage facilities, and administrative technologies suggest that the site was a special version of Kura-Araxes settlement in the highland area of Iranian Azerbaijan between the very end of the fourth/beginning of the third millennium to the last centuries of the third millennium BC. It would therefore be very important to address the question of whether social developments at Köhne Shahar were autochthonous, or catalyzed by the complexities of neighboring complex societies. Data from Köhne Shahar provides information that goes beyond social inequality, and may allow us to address the question of the degree of complexity at the site.

As Chapman (2003: 82-84) has emphasized, if we take into consideration different parts, components, and variations of 'complexity' (i.e. see Flannery 1972; McGuire 1983; Nelson 1995), and if we do not reduce the concept of 'complexity' to restricted variables such as inequality in wealth, then a wider range of complex societies with varying degrees and forms may be seen. Investigations at Köhne Shahar challenge us to rethink our approaches to the degree of social complexity in KACC. My study at Köhne Shahar has emphasized the significance of warfare as an impetus for communal cooperation and coordinated response to common risks, which, through creating inequality in access to decision-making and power, could have set the stage for the development of leadership positions (even if it was not developed before). Therefore, investigations at sites like Köhne Shahar and Arslantepe (Frangipane, et al. 2001; Frangipane 2000; Frangipane and Palumbi 2007), among other sites, point to greater

socioeconomic variabilities in the KACC, and suggest that our models of social and economic dynamics of the KACC need to be less monolithic.

Evidence of fortification wall, occupying a promontory, and few weapons points to the existence of warfare and long term external conflicts. Organization and coordination in time of conflict required decision-makings by a central leadership, which is an important aspect of the development of social complexity. Some scholars have already underscored the significant role of warfare in the emergence of hierarchical social ordering that led to the development of complex chiefdoms and states (Carneiro 1970; 1981; Earle 1997; Roscoe 2013; Schroeder 2006). The existence of a centralized political power is supported by various lines of evidence at Köhne Shahar. It should be noted that each of the forms of inequality (power, prestige, wealth) are and were always interrelated and convertible to other ones (Weber 1978: 926). Thus, it is possible that evidence of inequality in wealth and prestige might also be documented in the future explorations at Köhne Shahar.

I would argue that in addition to necessities of a leadership position, two essentials of power, namely motives and resources (Burns 2010: 12) also existed at Köhne Shahar. The protection, security, and defending external attackers were strong sources of motives and have created enough intentions. Moreover, control over specialized craft production, management of the fortification wall, flow of traffics through gateway(s), and exchange system could have been a great resource for a political leader. In this sense, various types of administrative technologies in production context indicate the control and its apparatuses and power relations between power holder and power recipients. Alongside, residential segregation is another manifestation of power relationships.

6.6. Directions for Future Research

Except the small stratigraphic trench, the excavations were exclusively focused on the last two occupation phases (phases 4 and 5). Most trenches were opened in the citadel; excavations in outer town were very limited. Only one trench was opened out of the citadel, and only two small trenches were put in the cemetery area. Thus, we have uncovered only a small portion of the site, which means that in order to provide conclusive results, further excavations are needed, particularly the in outer town.

My analysis of social inequality is based on data collected from three seasons of excavations at Köhne Shahar, a single special Kura-Araxes settlement. As I noted earlier, our explorations of social inequality raise more questions than they answer, due to the unique nature of the evidence. There are many questions still to be addressed, however, research in the future must consider at least the following major issues.

Firstly, we must ask whether residential segregation occurred from the first occupation phase, or whether it was developed out of some social processes in later phases. Gaining a clear understanding about the origin and development of the residential segregation at the site is critical for the understanding of social stratification, degree of complexity and eventually social structure of the community that lived at Köhne Shahar.

Further excavations, particularly stratigraphy in outer town, would shed some light on the possible early appearance of residential segregation. Such results might lead to a better understanding of whether the outer town represented an expansion of the population outward from the citadel in later phases, or whether it indicates that the original immigrant population

was already divided into two groups, one in the outer town and the other in the citadel. Such results might also shed light on the social organization behind the construction of fortification wall. As was discussed earlier, it is important to know whether the construction of the fortification wall was done by cooperation of people in both sides of the wall. Stratigraphic research in the outer town could test any of the three scenarios proposed for the construction of the wall, and whether outer town was formed contemporaneously with the first occupation phase inside of the citadel.

The second major question is also about residential segregation. In the only outer town trench, we recovered stone implements that suggest that people there were also involved with craft production. However, the data from the outer town is limited compared the citadel, and we cannot make concrete inferences about the full range of activities. More exposures could provide more data about life and economic activities in the outer town.

These additional explorations may allow us make better inferences about the nature and bases of residential segregation, and perhaps whether it was based on differences in occupation, ethnicity, status, or role. It may answer some of our questions, but probably will open up new questions about the social organization at Köhne Shahar.

Third, given the inherent difficulties and constraints of exerting power and political force (Earle 1991a: 4, 10), it is also important to address mechanisms other than warfare and control of specialized production that the leadership could have employed to expand and maintain its status. For instance, it is important to know how residential segregation was justified and on what ground. Among various strategies, ideological control, religious or ritual ceremonies, and feasting events are most significant. Earle (1987: 298) argues that "chiefs rule not because of

their power but because of their place in a sacredly chartered world order" (see also Earle 1991b: 98). Our data from Köhne Shahar consists primarily of strong lines of evidence supporting the existence of a type of political power. Hence, I hope that further excavations will reveal potential architectural, ideological, and ceremonial contexts directly related to political leadership.

Fourth, craft production at Köhne Shahar is a lens through which we can address and examine social organization, but we lack clear understanding about if there was also producer specialization. By more explorations in the citadel and outer town, we might address the scale of labor division, the intensity of production, and the degree of specialization. The data at our disposal makes inferences regarding the part-time or full-time status of craft production at the site difficult to make. We do not yet know about in what ways the finished goods were exchanged at Köhne Shahar (reciprocity, redistribution, exchange).

We need to know if inhabitants of the outer town played a role in craft specialization, how the subsistence economy was managed, and how the community was financed. However, large storage jars in one of the workshop units suggest that the economic system was most likely based on a staple finance (see D'Altroy and Earle 1985). Furthermore, we need to address the question of causal relationship between craft specialization and political complexity. More explorations are necessary to understand if craft production was practiced from the first occupation phase. Ultimately we need to go beyond an exclusive focus on the relationships between elites, producers, and consumers.

Last but not least, in our researches in the future we need to address the nature of the colonization and foundation of the settlement itself. Although the significant role of the main elements such as conflict/warfare, craft specialization, and social inequality/stratification are

well-known in the rise of social complexity, the combination and co-occurrence of these elements at Köhne Shahar seems unconventional. Addressing the question of the nature of the colonization and the political structure at Köhne Shahar is very important and requires more large exposures especially targeting the first occupation phase at Köhne Shahar.

We know that during the fourth millennium BC in Mesopotamia increase in exchange, flow of commodities, long-distance trade and interactions, new regional economic networks, and population movement (see Rothman 2001; Wilkinson 2014b) contributed to the emergence of complexity in the highland communities. These trajectories towards the complex way of life in the highlands have often been related to Mesopotamian-related communities (see also Helwing 2012).

Köhne Shahar representing a primary center for specialized production in the highlands represents one of these communities that took a path towards complex way of life. It is very important to ask whether the development of social complexity at Köhne Shahar represents an individual and local trajectory or it was a broader phenomenon in the Kura-Araxes communities. Not only Köhne Shahar challenges the notion of "core" and "periphery," it also indicates that the role of the Eastern Fertile Crescent and Caucasus has been neglected in our models of social complexity. In the light of research during the past two decades, it is increasingly apparent that highland regions in general, and the eastern wing of the Fertile Crescent and Caucasus in particular, played an important role in the formation of complex ways of life in the Near East. Research at Köhne Shahar will be contributing to this new understanding.

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